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May it Please the Environment?: A Study of the Role Regional Location Plays in Influencing Federal Court Decisions on Fossil Fuel Cases

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MAY IT PLEASE THE ENVIRONMENT?:A STUDY OF THE ROLE REGIONAL LOCATION PLAYS IN INFLUENCING FEDERAL COURT DECISIONS ON FOSSIL FUEL CASES

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Abstract

Environmental politics scholarship has emphasized that courts play a significant role in shaping environmental policy. The enhanced environmental policy implications that court decisions invoke on citizens and industry is due to the legislative gridlock that has plagued congress' ability to create sound environmental policy. As a result, groups on both sides of environmental disputes are tuning to the courts as avenues to advance their agendas. The power that courts have with respect to shaping environmental law and policy leaves room for personal beliefs and preferences to guide judicial decision making. Within the theory of legal realism, United States judges are observed as agents that make decisions based on preference, belief, and institutional influences. As a result, studies of judicial behavior and strategy have been implemented, to determine the motives that lie behind decisions made by federal courts. This study provides an account of judicial attitudes that are specifically pertinent to the field of environmental law and politics. By accounting for the use of environmental values established by prominent scholars of environmental politics, this study attempts to answer the question "Does the regional location of federal circuit courts of appeal affect the way the courts find in favor of or against the environment when the cases involve fossil fuel obtainment or production?" After analyzing the regional differences in fossil fuel decisions through a large-N data analysis, I examine particular cases in order to determine what environmental or anti-environmental attitudes motivated the court's decisions instead of relying solely on broad ideological values. An understanding of how judges are deciding fossil fuel cases across various regions can provide an explanation for the current state of United States fossil fuel production from an environmental frame.

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Chapter 1: Introduction

The United States of America is filled with treasures that came into existence long before residents, the congress, and courts. It is not rare for one's eyes to be captured by a flowing river or dense forest when traveling through any of the fifty states. When observing the United States' landscape today, it is also common to see the top of a drill piercing the horizon or a crater in the ground that was formed by mining. Furthermore, these two separate categories of objects that one can view in passing are often close to one another. Science has shown that the relationships between the products of mining and drilling and the natural world can be detrimental to human health. But without the products of drilling and mining, how would the car that was probably used to pass by the river and the mine be able to function? The answer is unclear, but in order for the United States to ensure that society can develop with technology and infrastructure while remaining healthy and maintaining a sound natural environment, careful analysis and proper regulation by political institutions are necessary.

It is evident that developments in technology, business, and convenient living have blossomed in the United States. However, development needs lifeblood that is beyond the many American inventors, businesses, and politicians that contribute to its existence. This necessary spark that even human ingenuity cannot replace is energy. Energy fuels the various other aspects of American life. In order to meet energy needs, the United States has consistently turned to fossil fuels. From the oil in California and Texas to the coal deposits in West Virginia, Kentucky, and Pennsylvania, industry has created methods to find, obtain, and produce the fossil fuels that the nation demands for energy. Energy demand warrants persistent exploration, and in most cases, a search for fossil fuels in the United States. The very advancements that necessitate

energy often allow the United States to discover new resource deposits and exploit them. However, this quest for energy does not endure without serious risk. The practice of gathering and developing fossil fuels has led to environmental harms including oil spills in the Gulf of Mexico and water pollution in the hills of Kentucky. The environmental damages that have accumulated as a result of fossil fuel production have grabbed the attention of Americans who have formed environmental interest groups and awareness groups that protest irresponsible fossil fuel production practices and call for clean energy solutions.

Unfortunately, increased awareness has been matched by that of profit-driven business. The fossil fuel industry has grown and strengthened in the form of large corporations including Shell and Exxon Mobile. The resources that the fossil fuel industry possesses are substantial and have led to the development of new fossil fuel obtainment techniques that are primed to alter the American fossil fuel landscape. The various forms of drilling and mining for oil and coal are now joined by hydraulic fracturing or "fracking." Fracking has ignited the American fossil fuel scene in two ways. First, it has allowed the natural gas industry to grow and entrench itself in the economies of Texas, Oklahoma, and Wyoming. Second, fracking has introduced new states to contemporary natural gas production and the greater fossil fuel scene. The shale beds that lie beneath New York, Pennsylvania, West Virginia, and Ohio have brought companies from across the nation including Chesapeake Energy and Range Resources to the American Northeast and Midwest. In order to gain public approval the gas industry boasts the job creation and business revivals that will accompany their exploration. While continuing to oppose irresponsible fossil fuel production in traditional fossil fuel regions, Americans have brought the fight for a clean environment to the areas that are becoming entrenched with fracking.

During the 1960's and 70's, congress passed several pieces of unprecedented environmental legislation including the Clean Air Act and Clean Water Act. Unfortunately, the cooperation that environmentalists could capitalize on in the past has ended. As a result, advocates for the environment who aim to challenge the fossil fuel industry and its environmentally harmful practices face a problem. They must identify actors and institutions that will provide political support for clean energy and clean living. This task is challenging because the strong support that fossil fuel companies give to political actors has resulted in many politicians supporting the industry.

Many political actors cannot pass up on the opportunity to provide jobs and economic stability to their constituents and as a result, fight for legislation that enables fossil fuel production to continue without strict environmental regulation. In order to retain their jobs, state representatives must win elections. Therefore, they are often at the mercy of their constituents who can be easily persuaded to embrace fossil fuel development because of the economic prospects that will enter their regions and hometowns. The opinions and issue stances of political representatives will match that of their constituent population. Many United States citizens view environmental regulation as a hindrance because it limits their job opportunities and their ability to accumulate wealth by selling mineral rights. Environmentalists do have support from members of congress who strictly oppose limited environmental regulation of the fossil fuel industry and support clean energy alternatives. As a result of strong opinions for and against strict regulation of the fossil fuel industry, congress finds itself unable to reach a consensus with respect to the United States' energy future.

With congress' ability to rationally improve the United States' energy agenda in a manner that meets energy demands and improves the environment, the judicial branch has become an outlet for the forwarding of both environmental and fossil fuel agendas. The fact that the courts are being leaned on by environmental groups and by the fossil fuel industry is no secret to the president, congress, or the judges who are relied on to hear the cases. The awareness of the shift of the fossil fuel versus the environment debate from congress has opened the door for strategic decision making by the judiciary and strategic appointments by the president and congress. If a judge is known to possess an issue stance on fossil fuel production that is favored by the president, then the president may appoint the judge in order to assure that the desired fossil fuel or environmental agenda is being enforced.

Courts that are located in regions that engage in significant fossil fuel production may find in favor of the fossil fuel industry and against the environment at a significant level. This significant trend of anti-environmental decisions could lead to detrimental environmental damage without the likelihood of political intervention. The United States is composed of distinct regions that possess varying amounts of fossil fuels. The regions that possess these fossil fuels enjoy economic benefits from obtaining and producing them. The economic benefits of fossil fuel production may lead to citizens of these regions to prioritize a persistent and substantial fossil fuel industry over environmental sustainability. Judges who preside in regions that engage in significant fossil fuel production may be more prone to make anti-environment decisions than those located in regions that do not engage in significant fossil fuel production because they share the same attitude towards a strong regional fossil fuel industry that citizens may have. The existence of this trend will provide evidence that political actors are strategically approving or denying the appointment of judges in those regions that will forward their fossil

fuel agenda. If judges are protecting regions that engage in significant fossil fuel production, then it will be difficult for the United States to make progress with respect to attaining a sustainable source of energy that does not harm the environment. Struggles to invoke policy change will ultimately end in anti-environmental outcomes because the legal appeals process usually ends at the Federal Circuit level which is divided regionally.

This study relies on the theory of legal realism and previous law and politics scholarship to determine what factors shape the judiciary's position on fossil fuel production and the environment. The majority of the existing scholarship (Revesz 1997; Cross and Tiller 1998; Cross 2012) on judicial decision making recognizes partisanship and ideology as the factors that determine a judge's profile and decision-making patterns. In contrast, this study will examine the judicial decision-making process by implementing factors described in environmental politics scholarship. I thus attempt to show that factors beyond partisanship and ideology can affect judicial outcomes related to the environment. The factors include regional location and specific the pro- and anti-environmental values that are included in environmental politics studies (Layzer 2012; Wapner 2010). Ideology and partisanship will be considered in an attempt to compare the strength of its relationship with judicial decision making with the strength of environmental politics factors. The factor that serves as the focal point of this study is regional location.

Both legal realism and law and politics scholarship (Nourse and Shaffer 2009; Miles and Sunstein 2008; Tiller and Cross 1999) contend that judges not only apply personal beliefs and issue stances into their decisions, but also realize that their decisions can have lasting policy implications. The scholarship provides evidence that judges engage in the same politically

motivated decision making processes that politicians do in order to appease the political actors and constituents located in their region. The issues that congress has with respect to agreeing on the United States' environmental policy future leave the court to accept or reject the way that industry and environmental groups, including the Environmental Protection Agency, interpret existing environmental statutes. The decisions that the judicial branch must make on environmental policy have the potential to change the way a statute has to be applied for an extended period of time while congress is unable to agree on new amendments and interpretations. The significant role that the courts have with respect to shaping environmental policy further motivates strategic rejections and confirmations of nominated federal judges to across the nation. The potential for this strategic activity is why examining the judicial decision making trends regionally is significant.

In Chapter 2 of this Independent Study, I review the literature to provide a theoretical background for the observations that will follow. The methods used in this study will be described in the methods chapter, Chapter 3. I outline two methods to examine regional trends in judicial decision making at the Federal Circuit level between 2001 and 2010: a large-N logistic regression and a comparative case study. In Chapter 4, I present the first analysis. The fossil fuel cases that were heard at the Federal Circuit level during the previously stated decade are examined in a logistic regression analysis that will also consider the partisan/ideological composition of the judges that hear the cases. The regression will be followed by a comparative case study, in Chapter 5, that will search for differences in the environmental and anti-environmental values used by two courts from different regions.

The conclusion will discuss the affect that any trends in case outcomes that are found in Chapter 4 may have on environmental policy. The trends will be linked to the case study results from Chapter 5 in order to determine if specific pro- or anti-environmental values are motivating judges to reach their decisions on fossil fuel cases. Any links between the use of values in certain regions and case outcome trends in certain regions could provide an explanation for why courts find in favor of or against the environment with high or low probability rates. When environmental groups turn to the courts for positive environmental policy change or interpretation, they may be at the mercy of judges who feel obligated to protect the economic prosperity of the region that they preside over at the expense of proper environmental policy interpretation. Identifying the regions that are subject to this phenomenon could provide environmental groups with an understanding of what they are up against and allow them to seek policy change or interpretations from other political institutions like congress. The shape that United States environmental policy will take in the future may be determined by judges who possess strong anti-environmental values. This study is intended to reveal whether or not this phenomenon exists.

Chapter 2: Theory and Literature

This Chapter provides an account of the foundational literature that motivates the research question and hypotheses that will be examined. The question that this study analyzes is "does the regional location of the United States Courts of Appeals affect the way that the judges who preside over these courts rule on fossil fuel cases?" Law and politics scholarship that includes the studies conducted by Miles and Sunstein (2008), Tiller and Cross (1999), and Friedrich (1964) apply the theory of legal realism to the judicial decision-making process and serves as foundation for this study. The idea that judges make decisions on environmental cases by including factors outside of the law is motivated by the work of Judith Layzer (2012) who provides an account of the values that judges allow entering their decision-making process. Using regional location as a variable that affects the judicial decision-making process is built from the work of Phillip Klyza and David Soussa (2008) who provide examples of judges applying anti-environmental logic to their decision-making process in order to protect their regions economic interests. There are two hypotheses that will be considered.

The first hypothesis is that courts that are located in regions that engage in significant fossil fuel production are more likely to find in favor of the fossil fuel industry and against the environment than those located in regions that do not engage in significant fossil fuel production. The second hypothesis is that the judges who preside over courts located in regions that engage in significant fossil fuel production will express anti-environmental values during their decision making process that leads to anti-environmental decisions while judges that serve in courts that do not engage in significant fossil fuel production will express pro-environmental values that lead to pro-environmental decisions. The first section of this literature review will provide an

account of legal realism which is the theory that this study relies on to justify the claim that judges apply factors other than law to their decision-making process. One outside factor that is often linked to the judicial decision-making process is ideology. The second section of this review will discuss how ideology is not the sole factor that judges rely on outside of law and section three provides an account of the values that should be considered when environmental decisions are being examined. Finally, the fourth section will cover the policy implications that scholarship attributes to judicial decisions in order to establish the significant affect that judicial decisions have on environmental policy.

The Theory of Legal Realism

Judges have been subject to analysis because of their inclusion of factors other than precedent and doctrine when formulating case decisions. This analysis was triggered by the theory of legal realism. Legal realism is defined as the belief that past legal standards and findings are not sufficient criterion to utilize when predicting the results of the judicial decision making process (Ingersoll 1966, 255). This theory is described by Friedrich (1964) as significant with respect to legal issues in the United States of America. Since its founding, the importance of legal realism has been interpreted and applied to the judicial decision making process in various studies (Gilmore 1961; Friedrich 1964; Ingersoll 1966; Decew 1985; Altman 1986; Miles and Sunstein 2008). Legal realism provides a basis for examining judicial behavior by considering factors outside of the strict application of legal doctrine. This section examines the components of legal realism and also provides an account of two contemporary branches of legal studies that have evolved from the theory.

One of the key characteristics of judges under legal realism is that they are believed to move past stringent considerations of precedent and stare decisis. Ingersoll (1966) interprets Llwelln, a founder of legal realism, to specifically "want to move past precedent to forecast judicial behavior" (256). Altman (1986) justifies the concept of legal realism moving past established standards and towards other factors for predicting judicial decisions making by stating that judges are motivated by factors that are outside of legal precedent because the established legal rules are often too vague to be relied on (208). Schaur (2000) provides a blanket statement with respect to the types of precedent that should receive minimal judicial consideration by including "constitutional provisions, statutes, rules, regulations, reported cases, maxims, and canons" (619). Realist claims of precedent's limited value questions the use of stare decisis which is a standard within legal practice that encourages judges to rely on the same standards of review that previous courts utilized when deciding on cases with similar fact patterns. Ingersall (1966) states that "stare decisis is based on repetitive facts and proper previous interpretations" which implies that previous decisions can be flawed and should not be considered without the inclusion of present day conditions that may not have existed in the past (257). Based on Ingersall's (1966) perspective, established legal doctrine cannot be the sole factor that judges consider when deciding cases because it leaves no room for the consideration of progressive understandings of society that could increase or decrease the significance of particular case facts over time. The weakened application of stare decisis is also visited by Altman (1986) who finds that precedent is not binding and that judges ultimately have the freedom to reinterpret previous holdings. An interpretation of precedent as weak during a judge's decision making process is provided by Gilmore (1961) who characterizes precedent's value as a predictor of judicial decision making as "slight or nil" under legal realism (1038).

The moving away from rules and precedent by legal realists implies that precedent is insufficient doctrine for judges to follow. Decew (1985) claims that legal realists would argue that the application of precedent to new cases does not allow for the law to adequately resolve disputes because legislators did not foresee contemporary issues as ever being subject to legal interpretation (419). The study's (Decew,1985) basis for this claim is rooted in the idea that the law should evolve over time (406). A reason for realists to question the application of law to new cases is demonstrated by Singer (1988) who cites terms including "reasonableness" as too broad to be interpreted "mechanically" over time (470). The concept of law as evolutionary leads realists to view legal trends of the past to be useless when applied to a new case that inevitable has its own unique set of facts (Ingersoll 1966, 258). If the law is supposed to change over time, then proponents of legal realism deem it impossible for the law to be the sole factor in judicial decision making. Altman (1986) also provides an account of legal realism necessitating a weakened reliance of law by the judges that allows for the consideration of personal preference during the judicial decision-making process. From a predictive standpoint, Singer (1988) states that "legal rules" are not enough to predict judicial decisions (470). This statement opens the door for a consideration of various other factors like ideology and policy preference wen predicting judicial decision-making.

Even though the law itself is not enough for judges to form a decision under legal realism, the theory does not imply that law should be abandoned during the judicial decision making process. Cohen (1950) describes "legislative law" as a "factor" that must be reviewed by the court, but is in no way determinant (888). Friedrich (1964) emphasizes that proponents of legal realism do not take issue with the use of law, but they contend that the law should be applied to the new evolutionary issues that people face (206). Cohen (1950) then adds to legal

realism's consideration of progressive human problems by stating that "human gains and deprivations" are necessary component of judicial decision making from a legal realist perspective (889). Interpreting law when making a decision is described by Mintz (2004) as the application of "text" as a resource that can help define an outcome (12). However, this interpretation still includes the realist idea that the ideal outcome in the mind of a judge is still factored into his or her decision (Mintz 2004, 12). A judge under legal realism is considered to be aware of the concept that legal issues evolve. Hwang (2006) describes the legal realist characterization of law as "flexible" which again promotes the idea that the application of law should change over time (235). An awareness of how new legal issues provide room for the use of preference, could motivate judges to decide based on their preferred case outcome.

Gilmore (1961) describes legal realisms evolutionary application of law to mean that "law is not static, but dynamic" (1038). Again, it becomes apparent that law is not to be abandoned, but altered to fit contemporary issues under legal realism. At the highest level of review, realists contend that the Supreme Court's "case-by-case" system of review opens the door for the court's decisions to be relevant with respect to present day issues that are outside of the previously established legal doctrine (Hwang 2006, 242). For example, the contemporary accounts of environmental damage consistently present new issues that must be solved by applying information that is not found in legal doctrine. Singer (1988) provides a similar account of legal realism by stating that the development of law is based on "situation types" (500). Again, particular cases will present judges with opportunities to loosen their reliance on precedent and apply personal factors into their decisions.

The realist concept of a workable and progressive interpretation of the law appears to be especially important when considering environmental cases. For example, Huffman (2008) regards judges as experts with respect to their knowledge of most "personal rights," but the continuous alterations in environmental values makes the applications of factors outside of the law to be considered (829). This phenomenon mimics Friedrich's (1964) interpretation of legal realism's use of law that consists of the law being interpreted in a manner that is "beyond…official legal authorities" (204). Huffman's (2008) review provides an example of the evolution of environmental rights by recalling the then newly articulated arguments that global warming is a harm that violates personal rights (825). This combination of outside influences and existing law is not always obvious according to Gilmore (1961) who describes judicial decision making as subject to outside influences, but hidden by the application of law. Courts are not expected to openly display or articulate the use preference in their decisions, but subtle cues that will be described later could provide evidence of Gilmore's assertion.

While the law under legal realism is portrayed as necessarily malleable, it is also viewed as incomplete. Decew (1964) presents the realist's perception of law to be fragmented by stating that "gaps in legislation" exist and warrant progressive applications (409). Altman (1986) describes rules as "vague" and that this "vagueness" is significant with respect to the outcome of any given case (208). Gilmore (1961) provides an account of how legal realists detested the nineteenth century concept that cases had to "fit" the law in order to be deemed right or even considered at all which implies that realists interpreted the law as incompetent with respect to providing a complete plan for any situation (1038). This interpretation of legal realism calls for progressive interpretation s of the law when the cases deal with unprecedented facts and scenarios.

The realist account of an incomplete law can be applied to environmental law. As societies understanding of the environment changes, so should the application of law to environmental cases. With respect to the Resource Conservation and Recovery Act, the Third and Ninth Circuit Courts of Appeal rendered conflicting interpretations of subsection (d)(2)(a) which applies to the extent that the Government must justify that a factory failed to acquire the proper permit to handle certain types of waste (Mandiberg 1995, 1169-1172). The Third Circuit interpreted the subsection in a manner that required the government to know that the factory did not have a permit, while the Ninth rejected the same "knowledge requirement" (Mandiberg 1995, 1172). The statute clearly had gaps with respect to prerequisites to legal environmental prosecution that were filled by differing judicial interpretations which lead to differing judicial decisions from courts in different regions.

The consequences that humans face as a result of court decisions should also be supplemented with considerations of science under legal realism. Decew (1985) provides an account of Summers, another founder of legal realism, who states that the evolution of both "science and technology" forces judges to account for factors outside of the law (410). Cohen (1950) also calls for the implementation of science into the judiciary under legal realism (897). By referring to science and technology legal realism opens the door for the consideration of breakthroughs in environmental science by judges when they hear environmental cases. If the understanding of the harms a particular practice inflicts on the environment changes, the court's interpretation of a case dealing with the practice should change as well. These considerations should be progressive and ever changing due to the evolutionary remedies and detriments to the environment that science continuously discovers.

The application of outside factors to legal decisions under legal realism empowers judges with respect to the policy making process. Gilmore (1961) attributes the deference that the United States Government gave to state courts with respect to refining aspects of "property law, contract law, and tort law" to the legal realist belief that judges ultimately make law (1039-1040). Decew (1985) states that under legal realism, judges should be able to create law (406). The review views law under legal realism as "value laden" which would have to be both new and at the mercy of the values existent in the deciding judiciary (421). Cohen (1950) reviews the role of judges under legal realism and describes it as parallel to the role of the legislature. Singer (1988) provides a realist justification for judicial law creation that describes law as something that is "made not found" (475). The strength of the judiciary's ability to make policy is expressed by Hwang (2006) who states that "an attempt to prohibit judicial policy making…must be in vain" (242). Carrington (1980) concedes that the legal realist assertion of judicial lawmaking does exist at the appellate court level. If the existing values of the judiciary are pro- or anti-environmental, then they would be influential in judicial policy creation under legal realism.

By moving away from the use of precedent and law, legal realism aims at applying outside influences into the judicial decision making process. One evident realm of influence is the review of social criteria. Singer (1988) states that legal realism attributes "social context" to have an effect on judicial decision making (470). Ingersall (1966) views "social factors" to be a leading area of analysis for legal realists and their pursuit of predicting judicial decision making patters (259, 260). By interpreting Summers once more, Decew (1985) includes "social activity" as a factor with respect to judicial lawmaking (410). Mintz (2004) strengthens the purpose of social factors in judicial decision making by calling it a "duty" of judges "to search for social justice"(11). The component of legal realism that requires law to be applied to decision as a

supplement to each new cases facts is also applicable to the present state of society according to Friedrich (1964) who emphasizes that the application of law must be conducted with a perspective of the "here and now of society" (203). This account of the present appears to be acknowledged as ever changing under legal realism. Decew (1985) describes society as in "rapid flux" and demonstrates legal realism's call for the law to follow a changing society in an adaptive manner (406). Hwang (2006) provides a specific area where social factors are applied to outcome by stating that "judicial decisions and concrete social experience" are intertwined when Supreme Court decisions are applied through a legal realist frame (219). Social factors have also carried over into 21st century interpretations and applications of legal realism as stated by Miles and Sunstein (2008). Gilmore (1961) adds social factors to his "static/dynamic" account of legal realism and the law by adding that "law changes as society changes" (1038). Environmental opinions on issues including global warming and water pollution that result from fossil fuel production change over time for better or worse and certainly would warrant the change in law that Gilmore explains.

Society's "creativity" has led to the implementation of agencies that support "ecosystems services" and alter the goals and values of citizens according to Huffman (2008, 838). Under legal realism, these new societal goals and values with respect to environmental aid are also considered by the judiciary. In order to apply social factors into their decisions, judges under the legal realism model consider social "reality, interests, and science" (Hwang 2006, 244). When applied to environmental cases, the influences of social factors includes "social justice" and "social needs" according to Mintz (2004, 22). However, Mintz (2004) warns that social factors do not provide a consistent standard of norms that judges can lean on when making decisions

(22). Though social factors are applicable to environmental cases, it is presumable that judicial interpretations will vary depending on the unique social influences surrounding each case.

Despite the vast array of previously stated components of legal realism and its potential application to United States legal studies of the judiciary, some studies (Decew 1985; Nourse and Shaffer 2009; Gilmore 1961) find flaw in the theory. The leading claim that rebuts contemporary applications of legal realism involves the formulation of present day statutes. Gilmore (1961) submits that "modern statutes" leave little room for "judicial manipulation (1046). In addition to the in-depth formulation of statues or use of "more words," Nourse and Shaffer (2009) add that today, there are "more laws, more opinions, and more procedures" which would provide a diverse set of precedent that can be applied by judges during the decision making process (73). Decew (1985) identifies the problem with legal realism that is applicable to the expansive and specific compilation of statutes that Nourse and Shaffer (2009) and Gilmore (1961) refer to by arguing that legal realism places no constraints on the judiciary's attempts to alter existing norms (417). Though it has been argued that strict legal realism is inapplicable to contemporary judicial decision making, the relatively new and evolving norms with respect to environmental knowledge provide a specific area of law that may still be subject to legal realism. Two models of legal study that have evolved from legal realism provide a foundation for its application.

Legal realism has inspired scholarly thought that considers the influences on judges that are outside of strict doctrinal interpretation. Freidrich (1964) specifically states that legal realism is significant with respect to legal issues in the United States (201). It would appear that this claim did not wither away with time due to the progressive areas of judicial behavior analysis

that have been attributed to legal realism. The themes of legal realism have had a substantial influence on contemporary analyses of judicial behavior, and the use of legal realism in various legal studies have been outlined by scholars (Miles and Sunstein 2008; Nourse and Shaffer 2009). When providing accounts of the motives and influences that provide judges with factors to consider that are outside of the law, both Miles and Sunstein and Nourse and Shaffer reflect on the use of political criteria to solve some of the problems that scholars face when defining judicial influences. However, even Miles and Sunstein contend that the future of legal studies that incorporate legal and political scholarship will continuously blur the distinctions between legal and political studies into a trend of empirical study that views law and politics through identical lenses.

Within the application of political science to studies motivated by new legal realism, two models appear to be applicable to the effect judges have on environmental cases and policy. The first is classified as the attitudinal model by Nourse and Shaffer (2009, 77). They state that the addition of political affiliation and ideological preferences have been observed by scholars as a motivating factor with respect to judicial decision making. There are two reviews (Miles and Sunstein 2008; Cross 1997) that describe the qualities of the attitudinal model of judicial decision making. Miles and Sunstein (2008) provide a similar account of contemporary legal realism's constant attempt to link ideology to the judiciary. Cross (1997) provides a direct account of the attitudinal modes of judicial decision making by stating that ideology is the basis for judicial decisions that are made with the judge's intent being focused on the result that the decision provides. The political aspect of ideology fits into the assessment of attitude and judicial behavior.

Miles and Sunstein (2008) a branch of new legal realism focuses on partisan/ideological connections. The branch is known as the attitudinal model. The link between ideology and party affiliation signifies that Democratic judges vote in a liberal fashion and Republican judges tend to decide in a less liberal manner according to Miles and Sunstein. The party preference under the attitudinal model seems to be defined by matching a judge's party affiliation with that of the president who appointed the judge respectively. Cross (1997) states that a judge who is appointed by a Democrat will exercise a decision making process that parallels his or her Democratic Party preferences (Miles and Sunstein 2008). Cross (1997) concurs by stating that judges who are ideologically motivated are seeking to render a decision that matches their political party's ideological beliefs and not the decision that necessarily abides by previously established legal precedent (266). Cross further provides an example of how the attitudinal model is applicable to environmental cases by stating "if an environmental group brings a citizen suit enforcing the Clean Water Act against a discharger of effluents, the liberal environmentalist judge will rule for the plaintiffs, while the conservative judge will rule for the defendant" (266). If conservative judges are going to consistently find against environmental groups, then regions that engage in significant fossil fuel production will inflict environmental harms that will persist without impediment if the courts that preside of the regions are conservative. Cross' example also assumes that ideology is the controlling personal factor that motivates judicial decisions involving environmental cases.

The attitudinal model places substantial weight on judicial beliefs, but does not appear to consider the outside behavior of agencies. That is where the "new governance theory" that is outlined by Nourse and Shaffer (2009, 88) figures into the branches of new legal realism. The model incorporates "institutional experimentation" and the consideration of "interest groups,

government agencies, and citizens that the law is intended to benefit" by examining the use of law through each frame holistically (88). Scot and Sturm (2007) incorporate the law into the new governance model by describing it as a source for critical deliberation between interested "institutions" and amongst the courts. The power that agencies and interested private stakeholders have with respect to shaping the law in ways that forward each group's respective interests is significant according to Orly Lobel (2004) who states that the new governance model "broadens the decision making playing field." Lobel continues by stating that the range of opinions and the use of specialized professional inputs during legal decision making have increased amongst institutions. The new governance model grants significant law shaping power to political agencies and actors which minimizes the effect that judges have on lawmaking.

From an environmental standpoint, it appears that progressive and controversial understandings of environmental science would make environmental law a topic that institutions and groups with economic and environmental interests would constantly try to alter both in and out of the courts. Bressman and Thompson (2010) provide an account of how presidential manipulation of the Environmental Protection Agency (EPA) affects the way environmental law can be manipulated with respect to climate change. The account of climate change law through a new governance frame (Bressman and Thompson 2010) states that President Bush and President Obama both influenced the EPA's climate change agenda. The President is not the only interested stake holder who can potentially influence the EPA's environmental policy agenda. Lobel (2004) claims that the "social arenas" that the legal deliberations are conducted in affect judges during the legal decision making process, and that these deliberations include "government agencies, private groups, and private organizations" (401).

This collaboration opens the door for the interests of prominent businesses to influence the environmental policy process. Collaborative influences could be potentially controlling in a regionally dispersed area of economic engagement like fossil fuel production. Though the new governance model provides an account for law altering and policy creation outside of the courts, it is possible that the courts involvement is substantial in environmental affairs due to the effect that gridlock may have on the ability of government agencies to create substantial environmental law and policy. This phenomenon will be reviewed in a later portion of this chapter. The new governance model infers that there is an ever evolving and strategically manipulated law. The role of the courts is present but undefined. However, under environmental law during contemporary legislative gridlock, the court's role is substantial. By combining the implications of both the attitudinal and new governance models, it is apparent that the shaping of environmental law is not only ever changing and the subject of deliberation between various institutions, but also at the mercy of attitudinally influenced judges who apply factors outside of the law to settle discrepancies during deliberation. The next two sections will assess the work conducted on attitudinal influences of judges and the strategic behavior of both judges and outside actors when both sides deal with environmental law.

The Attitudinal Model of Judicial Decision Making

Legal realism has led to the evaluation of judicial decision making through the attitudinal model. The factors that influence judicial decision making under the attitudinal model resemble the very qualities that any informed individual would apply to his or her own evaluation of a set of facts. Judge Patricia Wald (1999) broadly claims that "personal beliefs" affect judges (236). This claim appears to humanize judges with respect to their assessment of a given situation.

Smith and Blumberg (1967) attribute attitudinal effects on judicial decision making to a judges "social biography." (99).The personal qualities that influence judicial decision making also take time to accumulate. One cumulative factor is "life experiences" (Wald 1999, 235). According to Judge Wald, these experiences continue after a judge assumes a place on the bench (240). Smith and Blumberg (1967) also state that the influence that a judge's social makeup has on the decision making process is present at all court levels (99). These social and personal factors that cumulatively affect a judge's decision making process are inescapable and relevant under the attitudinal model. Carp and Stidham (1998) do note the significance of attitudinal qualities at the appellate court level, and specifically includes "personal values" in the description (172). On its face, the attitudinal model appears to open the door for a variety of beliefs and values to be significant aspects of a judge's decision-making. For example, the economic philosophies of a judge that are a result of his or her time spent living in a region that engages in substantial fossil fuel production may influence the judicial decision making process. The literature (Miles and Sunstein 2008; Seigel 1999; Revesz 1997) establishes that values that move beyond legal doctrine are useful with respect to the assessment of cases that involve the contentious topic of fossil fuel production. However, few attitudinal values outside of ideology have been both observed and scrutinized throughout law and politics scholarship, which motivates consideration of what values should be applied to an environmental study of judicial behavior.

The personalization of judicial decision making leaves room for personal preferences to control judicial decision making instead of legal doctrine. Seigel (1999) goes as far as stating that preference is the sole motivating factor during the judicial decision making process (1590). Even the defensive Judge Wald (1999) admits to having "personal preferences" though the amount of weight preference is given during the decision making process is minimal at the very most (237).

The source of preference is demonstrated broadly due to Seigal's (1999) claim that there are multiple ways to uncover what a judge truly likes (1606). The questioning that is motivated by the previous statement must not only consider the source of preferences, but also accurate ways to measure these sources of attitudinal preferences.

Though the attitudinal model provides a broad justification for judges to infuse personal values into their decision making, the power that precedent and legal norms may still have over the judiciary has been considered as a rebuttal to the attitudinal model. Edwards and Livermore (2009) provide an argument against the attitudinal model by stating that attitudinal models are flawed because they do not account for the application of legal doctrine by judges when they decide cases (1908). That is, the attitudinal model focuses predominantly on personal value and not previously established legal doctrine. Judge Wald (1999) states that cases that require judges to use personal factors during decision making are "rare," which infers that there are not substantial avenues for judges to infuse personal factors into their decisions (236). Judge Posner, (2006) a judge from the Seventh Circuit Court of Appeals, argues that even if judges want to include personal factors such as "emotion," their application of these non-legal factors to the decision making process is difficult to justify due to the inability of judges to include personal belief factors into their written opinions (1065). These claims that refute judicial inclusion of personal attitudinal factors are not strong rebuttals to the attitudinal model as applied to this study because contemporary environmental law opens the door for the use of personal values by the judiciary..

The ability for justices to apply attitudinal values originates from the case of *Chevron U.S.A., Inc*. v. *Natural Resources Defense Council, Inc*. 467 U.S. 837 (1984). Chevron created a

"loophole for…preference initiatives" (Cross and Tiller 1998, 2164). Under the two-pronged "*Chevron* doctrine" a court must first determine whether the "statutory provisions" in question are clear or "ambiguously" stated by the agency that created the provision (Czarnezki 2008, 773). Czarnezki (2008) states that any court's interpretation of a statute as ambiguous or unambiguous is subjective. Environmental law consistently deals with contested agency interpretations (e.g. The Environmental Protection Agency) which are subject to appellate court review to determine the clarity of statutes under the Chevron Doctrine. The subjective nature of Chevron Doctrine applications provides a legal standard that invites the value-laden decision making by judges described in the attitudinal model. Judge Wald (1999) admits that judges do disagree on the clarity of statutory provisions under the Chevron Doctrine, but not often enough to consider the doctrine to be an avenue for value-laden judicial decision-making (242). The issue with Judge Wald's position with respect to the small amounts of disagreement when applying Chevron is that environmental cases provide a unique arena that induces value based disagreement between judges. Miles and Sunstein (2008) point out that regardless of value positions, judges agree that environmental issues are "arbitrary" which further enhances the potential for judges to engage in personalized applications of the Chevron Doctrine to environmental cases regardless of issue stance (845). If the court deems the statute to be ambiguous, step two of the Chevron Doctrine is enacted.

Under step two the Chevron Doctrine courts can grant deference to the government agency's interpretation of the vague statute which could also be a value-laden decision by the court. Tiller and Cross (1999) found that when a circuit court panel that is composed of three liked minded justices, the panel will grant "chevron deference" to the government agency's statutory interpretations eighty-one percent of the time if the agency interpretation is "presumed"

to match the attitudinal "preferences" of the panel based on predicted political alignment (230). The study identified political alignment with figures that defined the party identity of each judge as party shared by the appointing president. Judge Wald (1999) concurs with the principle that judges must refer to both "experience and beliefs" when congress does not provide a clear statutory interpretation for the court (250-251). By stating that "Judges would be rudderless ships if we did not steer through uncharted and murky waters without some sense of conscience or some core of personal beliefs" Judge Wald further asserts that judges will lean on attitudinal factors when they do not have a concrete understanding of doctrine to follow (236). This statement would include situations that involve the interpretation of vague environmental statutes. Under the context of post Chevron environmental statute interpretation, it appears that judges will apply attitudinal factors to fossil fuel cases by deciding to grant deference to statutory provisions that are interpreted to the court by an environmental agency that matches the judge's attitudinal patterns. This claim is based on Judge Wald's (1999) confession that personal factors will be utilized when judges do not possess thorough knowledge of the contested doctrine. According to Wald, judges cannot be well versed in the ever changing concepts of environmental legislation and therefore must trust agencies that are led by actors who match their belief sets. The essay considers belief to be the guiding factor for judges to rely on when they are out of their comfort zone with respect to understanding legislation. However, under traditional attitudinal frames, the personal factors considered by scholars appear to be too reliant on ideology and partisanship. This minimal coverage of judicial belief factors is a gap in the literature because it limits the judge's use of belief and preference to one aspect of his or her social makeup (ideology) when the facts surrounding environmental cases provide new and progressive issues that call for new criteria to be added to a judge's personal profile.

Proponents of the attitudinal model have consistently attempted to link judicial attitudes to ideological preferences, and have demonstrated this correlation with some success. In fact, Judge Posner, (2006) states that ideology does indeed affect judicial decision making (1053). While providing an account of traditional attitudinal theory, Choi and Culati (2008) also note that the model calls for a direct ideological effect on the judiciary (92). The effect is not only direct, but also "significant" according to Tiller and Cross (1999, 217). They go as far as to state that ideology "essentially decides" how judges determine case outcomes (217). Even after a dissenting publication by Judge Wald (1999), Tiller and Cross 1999 maintain that ideology is a significant "influence" on judges in a different publication (263). The application of the attitudinal model to judicial decision making is based on the three judge appellate court panel dynamic. Though the success of linking ideology to judicial decision making through correlation has provided some significant results, causal relationships remain uncertain due to the multiple factors that may also influence judicial attitudes and cause a judge to decide in a certain manner (Ruger, Kim, Martin, and Quinn 2004, 1159). For example, a judge that grew up in a town that benefitted economically from fossil fuel production may identify himself or herself as liberal when discussing social issues, but exhibits a conservative stance towards the environment that favors business over the environment. In this scenario, the judges' economic preferences were based on experiencing the economic benefits of fossil fuel production and not ideology. The limited options within the framework of ideological studies on judicial attitudes and decision making are a reason for the inability of the studies to consistently provide reliable correlations and causal relationships.

The majority of studies classify ideological positions as either liberal or conservative (Cross 2012, 695). Though these classifications are traditional and prominent in empirical

studies, (Yung 2010; Cross 2012; Ruger et al. 2004; Epstein et al. 2007) additional categories that reflect the attitude of judges that are less ideologically affiliated have been explored. When assessing Supreme Court attitudinal predictors, Ruger et al. (2004) classified Justice Sandra Day O'Connor as "moderate" while generally referring to the other eight justices as either liberal or conservative (1158, 1173). Yung (2010) also provided an "ideologically moderate" classification when assessing ideological alignments of appellate judges that sit on the federal courts of appeals (1173). Though an ideological background that is in between the liberal and conservative ideological spectrum has been acknowledged in empirical work, the strict liberal/conservative model is both dominant and flawed.

By limiting classifications of judicial motives to either conservative or liberal, studies have neglected the weaknesses of basic ideological classifications. This "binary" consideration of ideology on a "conservative vs. liberal" spectrum is problematic according to Cross (2012) who claims that the value of each decision made by a court cannot be determined by merely coding the citations in an opinion as conservative or liberal (695-696). Traditional ideological coding has been critiqued by other studies as well. Yung (2010) casts a negative view of ideology as an accurate variable for studying judicial decision making by claiming no "effective measure of ideology to be in existence" (1177). One reason for the problematic nature of strict ideological classifications is the moderate characteristics of contemporary judges that Carp and Stidham (1998) claim to be in existence due to the result of strict appointment processes (215). Ruger and colleagues' (2004) findings that a mechanical calculation of judicial decision making that considered "circuit of origin, the issue area involved in the case, type of petitioner and respondent, petitioner's arguments, and ideology" was a more accurate predictor of judicial decision making than case type and liberal/conservative judicial ideology classifications

(1163,1187). The findings provide evidence that utilizing factors on other than ideology is necessary when predicting or attributing realist factors to judicial decision making.

The personalized criteria that composes a judges attitudinal background surely leads to one judge being more ideologically aligned than some judges and less ideologically aligned than others. Tiller and Cross (1999) introduce the claim by stating that the extent of a judge's liberal or conservative beliefs varies across the greater judicial population. The need for new criteria to be utilized when attributing attitudinal factors to judicial decision making appears to be exceedingly necessary within the liberal ideological classification of judges. Yung's (2010) study of circuit court judges revealed that within the sample of 177 judges that were appointed by Republican Presidents who are traditionally considered to be conservative were "more ideological" than those judges who were nominated by Democratic Presidents who are traditionally considered to be liberal (1201). This finding indicates that conservative judges are more likely to rely on their ideology to guide their decisions than liberal judges.

With respect to environmental cases, the use of liberal classifications is not sufficient due to a "weakened liberalism" that has evolved within the study of environmental values (Klyza and Sousa 2008, 24). Based on this claim the liberal ideological classification that is perceived as pro-environmental has deteriorated over time. A reason for this weakened liberalism is the political activity that the business sector has engaged in since the 1980's. Though Revesz (1997) has found some evidence of liberally-based environmentalism in the judiciary, the study concludes in the 1990's which leaves out a piece of the weakened liberalism timeline which is described by Klyza and Sousa (2008) to have progressed through 2006 at a minimum. The significance of a consideration for weakened liberalism is based on the potential for a judge that

attitudinal models would define as liberal to actually possess anti-environmental beliefs. As a result of weakened liberalism, judges appointed by liberal presidents may have shifted away from previous pro-environmental beliefs due to the damage environmental initiatives are perceived to inflict on the economy based on the argument forwarded by Klyza and Sousa. The lack of attitudinal coverage of environmental cases since 2000 motivates a new study that challenges ideologies attitudinal power over judges in the 21st century.

Increased business incentives would certainly motivate liberal judges to move towards the middle on environmental issues based on Carp and Stidham's (1998) claim that most appellate judges are among the "social and economic elite in the United States (68-69). This claim portrays judges to be motivated by the economic incentives that the business sector's environmental protests entail. The significance of a judge's socioeconomic status is strong according to Bowie and Songer, (2009) who state that a judge's "social biography affects decision making" (99). Revesz (1997) would disagree with weakened liberalism and the claim that ideology was not the controlling attitudinal influence on judicial decision making during environmental cases. His study found that Democratic justices reversed a significantly larger amount of environmental challenges than Republican judges beginning in the mid 1980's. However, his work was limited with respect to the courts that were considered. The study only considered the D.C. circuit which is composed of judges that originate from various states and regions within the United States. Therefore, the composition of the court does not allow the judges to share a common personal attachment to the D.C. area that the court presides over.

Carp and Stidham's (1998) finding of a "wide variety of regional variations" in appellate court behavior provides evidence that personal attachment to an area may indeed be an

attitudinal factor of judicial decision making (217). With the exception of the federal circuit, the lessened opportunity for judges to consider their regional attachments when making decisions is unique to the D.C circuit. When considering the business challenges towards the environment, Revesz (1997) also fails to specifically consider specific industrial challenges (i.e. fossil fuel production industries). This negligence is problematic because as Sisk (2008) states "certain variables, including ideology, are more likely to emerge and have greater substantive effect in certain types of cases…" (890). Another specific factor that is unique to environmental cases is the concept that the statutes that are in question deal with natural entities including water and land that can be cherished by certain individuals due to regional attachment. By applying Sisk's claim, it is possible for a new factor like regional attachment to be a more effective determinant of judicial decision making than ideology when dealing with certain types of environmental cases like those involving fossil fuel production.

When combining a judge's social/economic status to Bowie and Songer's (2009) claim in a business versus the environment case setting, the economic arguments from the business sector's legal representation would appeal to many appellate judges and therefore influence decision making. Judge Wald (1999) on the other hand, specifically states that judges do not observe the plaintiff in order to determine if it is a "pro-environmental group, an individual, or a regulated company" before presiding over a case, and therefore could not allow their opinion of a party in the case to affect their decisions (237-238). This claim does not respond to the argument that a politically mobilized group could influence decision making. For example, a prominent fossil fuel company could provide political pressure throughout a region that leaves the economic status of both the community and the judge susceptible to change if the industry is

heavily regulated. A strong articulation of the consequence of regulation by the industry could affect how oblivious judges are to the plaintiffs and respondents in a case.

Along with being held as relevant, ideological considerations have also been associated with political significance due to the scrutiny that judicial nominations have received from congress because of the prospective judge's ideological alignment (Yung 2010). Carp and Stidham (1998) concur with Yung's (2010) assessment of political opposition to particular judicial appointment proposals, but adds that the controversy occurs when the conditions include a presidentially appointed a judge that is perceived to be "ideologically extreme" (87). Tiller and Cross (1999) agree with the idea that the ideological orientation of a judge matches that of the appointing political figure(s), and even state that the ideology of the appointer is an appropriate piece of coding criteria for empirical attitudinal studies. However, Judge Posner's (2006) interpretation of ideology as an influence on judicial decision making is one of personal values and not necessarily strict political alignment. This questions the use of ideology as a political influence at the judicial level. The interpretation asserts that ideology is a set of "bedrock beliefs about social, economic, and political questions" (1059). However, the judge fails to address the extent that ideology controls political decision making. This gap necessitates an account of other personal belief cues that may be the actual controlling beliefs during judicial decision making that affects environmental policy. Therefore, it is possible for a judicial decision to be influenced by ideology however; a judge's ideology can change over time and influence cases involving certain issue areas more than others.

When analyzing Supreme Court Justices, Epstein, Martin Quinn, and Segal (2007) conclude that ideological alignments of the justices and the president that appointed them wear

down over time due the justices "drifting" from their original ideological positions (1540). The study provides examples including the originally "left of center" Justice Felix Frankfurter's ideological evolution that resulted in him being one of the most conservative justices on the panel by the end of his career (1512). The concept of judges changing their ideological stance on issues not only includes change over time, but also includes change across different topics. Edwards and Livermore (2009) argue that ideology will be inconsistent when it is applied to different issues topics. It is then conceivable that a judge who is liberal with respect to issues like health care and taxes could be conservative with respect to the legal issues surrounding fossil fuel production and vice versa. Again the use of a value system that moves away from a limited ideology scale and focuses on an environmentally conscious set of coding criteria is necessary.

The attitudinal model's infusion of personal value sets into the judicial decision making process appears to be appropriate when examining environmental decisions. The introduction of the Chevron Doctrine into environmental cases also allows for judges to apply personal values even when they are following precedent. However, there is a need for the application of new environmental values to the attitudinal model when examining environmental cases. This is due to the shifts in ideological decision making patterns by some judges over time and the overarching concept of weakened liberalism in the field of environmental politics. The consideration of environmental values cannot be limited to pro-environmental standards. An inclusion of values that perceive ecological entities as vehicles for economic benefit must also be included to provide a business versus the environment comparison. Ultimately, strict ideological considerations are too limited with respect to value considerations in the field of environmental law and politics. The next section reviews the pertinent environmental values that should be attributed to judicial decision making under an environmental frame.

Environmental Values

Studies of environmental politics have considered specific environmental values when assessing the motives of political actors who make significant decisions regarding environmental policy. These values can be applied to judges. The implementation of environmental values into the study of judicial behavior allows for the consideration of specific trends and themes within the judicial decision making process that focus solely on environmental law and politics. There are specific environmental value categories that may appear binary, but ultimately provide studies on environmental values with multiple criteria. The categories are outlined by Judith Layzer (2012) who states that people who make up the American population who possess pro-environmental values fall under the category of environmentalist, while those who possess no concern for the environment fall under the "cornucopian" category (2).

The term "cornucopian" merely represents anti-environmental values in this study. Cornucopian values may also be called "promethean" and both terms are used interchangeably in this study (Layzer 2012, 4). Though providing only two categories may appear to provide overarching classifications for environmental actors that mimic liberal/conservative ideological studies, Layzer's are composed of several specific value cues that are excellent standards for a law and politics study of judicial behavior. Ultimately, the environmental and cornucopian (anti-environmental) themes are rooted in specific forms of pro and ant-environmental beliefs that can be identified in both legal and political documents. The environmentalism value is described as a "congeries of beliefs" that includes "preservationist, conservationist, and limits-to-growth models" (Layzer 2012, 2-3). These three specific values all provide evidence of environmental beliefs. The study also provides specific cornucopian values which are "technologic optimism

and a substantial concern for individual liberty" (Layzer 2012, 4-5). She contends that judges can be either cornucopian or environmental which opens the door for a study of the judiciary that applies these two values that have previously been used to observe environmental policymaking processes. The potential for applying pro and anti-environmental values to judges and their opinions is stated, but the lack of attempts to code judicial documents based on environmental values is the gap within the literature that this study fills. This section will observe the components of environmental and cornucopian values and their applicability to fossil fuel cases.

The first theme reviewed is the cornucopian belief that promotes policy and law that is detrimental to the environment. Confidence in technology is the first specific value reviewed within the broader cornucopian theme, and is based on the idea that human beings can and will overcome any natural barrier to economic prosperity (Layzer 2012). Nicholson (2010) cautions that this technology based mindset is a "driver of environmental harm" (287). The review continues by characterizing the technology optimist belief as self-motivating because the environmental problems that arise from technology are viewed as resolvable through the implementation of more technologic solutions. In other words, humans create technology which in turn leads to environmental degradation that is expected to be remedied by even more technological solutions. This concept is cyclical and ultimately leaves the planet with consistent environmental damage from technology. Hoffert (2006) adds that technologic optimism is not only rooted in the advancements that have occurred over time, but also considers the human population to be obligated to foster technological advancements that can remedy any environmental issue. Hoffert also classifies the world as a technological civilization. Ultimately the technology optimist value set is one that is persistent due to the immediate returns that the

use of technology has provided for society in the past and the persistent need for more technological solutions from an optimist's point of view.

The technology optimist value set is easily applicable to fossil fuel cases. Technology will specifically eliminate any potential economic shortcoming (Smith and Thompson 1998). By viewing technology as remedy to scarce economic assets, the cornucopian reliance on technology is used as an argument that refutes any claims that the exploitation of fossil fuels as nonrenewable resources is detrimental to the environment. Technological confidence is used to create "optimism" for future energy consumption by instilling a belief that fossil fuel production can be both replaced by technology that will aid in providing new energy alternatives, and allow for adequate fossil fuel exploration without regard for environmental consequences (Layzer 2012, 4). Krier and Gillete (1985) provide a similar account of the technology optimist by stating that "If environmental quality is threatened, more effective pollution control technology can be developed to deal with the problem" under the technology optimist frame of thought (407).

Technology optimism is a value that can be identified within judicial behavior. First, the belief relies on political authority to provide support and resources that are necessary for promoting their agenda. Krier and Gillette (1985) state that technology optimists look for government support with respect to promoting technology based environmental agenda's. This characteristic can be present in judicial decisions due to the use of agency deference that the previously described Chevron Doctrine permits when judges assess environmental cases. The other aspect of the technology optimist value system that fits into judicial decision making criteria is the idea that technology optimism is rooted in social forces (Nicholson 2010). Nicholson (2010) describes society's role in technologic optimism as one that shapes the way in

which the industrial world needs and defers to technology as a solution for environmental problems. This concept fits into the judicial decision making process because of the judge's use of his or her social make-up during the decision making process that is described by legal realism. Judges are inevitably brought up in or exposed to industrial America, and therefore are susceptible to the technology optimism that is present in contemporary American society.

The second value within the cornucopian theme is an appeal to personal liberties and private property at the expense of the environment. Layzer (2012) defines the "individual liberty" component of the cornucopian value as "freedom to do as one wishes without interference" (4). This belief is one that views environmental regulation as a "limit" that prohibits society from exercising freedoms (4). Wapner (2010) adds that the appeal to personal freedoms that cornucopian values include, views environmental protection as a "paralyzing" action (34). From a political standpoint, the unwillingness to sacrifice personal liberties is demonstrated by calling for a political process that allows people to obtain "material desires" without limits (34). Again the cornucopian model fits into judicial decision making because judges have the ability to agree with or challenge politically motivated agency interpretations of environmental statues. The persistent call for a maintaining of property and material satisfaction that is demonstrated by Wapner allows for a consideration of fossil fuels as material means to achieve wealth that cornucopian judges would be inclined to agree support from a personal liberty frame.

The main component of the personal liberty is private property ownership. Shafer, (2006) who describes the dominant social paradigm in Western societies as a value set that parallels cornucopian ideals, states that the "political dimension" of environmental values entails a

"commitment to private property rights" (121). Layzer (2012) states that cornucopians believe the government must "assign property rights to the Earth's resources" which would allow for persons to extract the resources as wanted or needed (4). Dresner (2002) states that the view of private property manipulation as a right parallels the "Lockean justification for private property rights" which suggests that the use of owned materials is justifiable because the action does not harm others, and the amount of materials that can be exploited are limitless (142-143). Cannavo (2010) provides a similar account of private property values by stating that the owners of private property refute any action that would reduce the value of their property. With respect to fossil fuels, the cornucopian appeal to private property ownership would entail landowners to oppose regulations that limit resource ownership and extraction which would lead to these owners opposing regulation through the legal system in the form of statutory provision challenges. The two concepts of individual liberty and technology confidence can be identified as specific evidence of the cornucopian environmental value. The value itself provides a concrete set of components that can be used to trace environmental attitudes in a way that is more reliable than ideology because it eliminates the risk of a judge having certain ideological preferences for one issue (e.g. marriage rights) and another ideological preference for a different issue (e.g. environmental regulation).

Like cornucopian values, environmentalist values are observed as specific sub-categories. Gillroy (1998) states that there is more than one set of environmentalist values, and each variance gives a different amount of "standing" to the natural world (133).The first component of the environmentalist value set is conservationism. The conservationist believes that resources should be used, but in a manner that ensures a long term abundance of the resources being exploited (Layzer 2012). Gillroy (1998) describes conservatisms appeal to future generations as

a way to conduct resource use in a "timeless and nonrelative" manner (137). In order to understand that the use of natural resources must be conducted in a cautious manner, one must "see beauty, show kindness and act justly" by understanding that nature itself has value (136). Another source for conservationist values is the belief that resources are indeed limited (Robinson 1969). If one believes that resource abundance is infinite, then there would be no need for conservation.

Conservationism is also based on a fear that economic systems will fail if natural resources are misused. Robinson (1969) states that conservationism consists of the notion that "industrial economies" will stop functioning if natural resources are not used under "careful management" (454). Ultimately industrial countries must be checked, or they will carelessly exploit natural resources. Layzer (2012) considers conservationism to include a lack of faith in the ability of industrial nations to self-regulate natural resource use. The answer to industry's misuse of natural resources could come from government regulation. The regulation of natural resource obtainment is regulated by the government, but when disputes regarding the enforcement of regulation arise, a judge will have to interpret the statutes in question, and a belief or denial of conservationism could aid the judge in formulating a decision.

Unlike conservationism, the preservationist branch of environmentalism does not approve of simply controlling natural resource use, but rather emphasizes the need for natural ecosystems that remain untouched throughout time. Layzer (2012) describes the preservationist as one who believes that the value of ecosystems is their natural form and as altered by humans. There is still an appeal to future generations in the preservationist branch of environmentalism. However, it is one that considers the spiritual benefit that future generations will receive from existing with

unharmed natural lands and not the material benefit that can be received from using saved natural resources (Layzer 2012). The spiritual benefit received through preservation is based on intrinsic value according to Gillroy (1998). His review continues by stating that "personal happiness" is not the goal with respect to human interaction with nature, and that a realization that unharmed ecosystems are necessary for human development (143). Judges who interpret environmental statutes as harmful because the statutes allow for constant manipulation of unharmed ecosystems are judges who follow the preservationist branch of environmentalism.

The final branch of environmentalism is the limits-to-growth model. Within this model is a concern for future generations, but the concern is based on resource depletion in a world that is experiencing human population growth (Layzer 2012). Followers of the limits-to-growth model believe that "unregulated markets" will lead to "unsustainable" levels of production (Layzer 2012, 3). Dresner (2002) states that the hole in the ozone layer and the pollution of fisheries are examples of humans surpassing the natural limits to each of the two resources by attempting to grow with respect to population and industrial power. One theory that attempts to solve the limits-to-growth problem is the use of caps on resource consumption and production in order to stabilize environmental degradation and continuously redistribute the right for an industry to produce and consume a resource (Dresner 2002). The difference between the limits-to-growth and conservationist models is that the conservationists view natural resources as an asset that cannot be eliminated by careless use, while those who support the limits to growth model believe that resource overuse will not only deplete the resource, but also detrimentally affect the greater ecosystem (e.g. destroying the ozone will harm flora and fauna within ecosystems by increasing global temperatures). By implementing new value criteria into the attitudinal model for judicial behavior, it is possible to observe reliable values that pertain to environmental law and politics.

Environmental and cornucopian values will be identified in judicial opinions through a comparative case study to determine how judges logically apply on theme over another in order to come up with an environmental case decision. The next section will focus on how the environmental attitudes of judges affect the environmental policy process.

Judicial Decisions and Their Policy Implications

Judges not only resemble political actors because they are influenced by attitudinal factors, but also because the decisions they make affect policy in the United States. The granting of significant power over policy began during the reconstruction period when congress expanded the court's ability to control the policy process (Gillman 2002). Congress' intent was to "preserve national policies" which indicates that the ability for the judiciary to play a significant role in the policy process has been noticed and utilized by outside actors for over one hundred years (Gillman 2002, 515). According to Tiller (2002), congress' ability to infuse partisan influences into the judiciary is still in existence due to the fact that congress still "controls judicial size, funds, and appointment" (1466). The reason that federal judges have policy power is that their decisions affect how people and other political institutions work with policy. Clayton (2002) describes this policy power by stating that the judicial branch's interpretations of statutes must be followed by the other two branches. This policy power is evident in the specific field of environmental policy. For example the Supreme Court's Decision in *TVA* v. *Hill* affirmed the clarity of the language located in the Endangered Species Act (Klyza and Sousa 2008). As a result of the Supreme Court's affirmation of the current Endangered Species Act language, government institutions, including the U.S. Fish and Wildlife Services had to reconsider previous species classifications and ultimately declare new species as endangered (Klyza and Sousa

2008). This change was due to the fact that the U.S. Fish and Wildlife Services could no longer claim that Endangered Species Act language was vague and deem species that should be classified as endangered as safe or not endangered. *TVA* provides an example of how a court decision can change the way government organizations enforce environmental policy. The power that judges have over environmental policy in the United States makes the judges actors with respect to policy creation.

Before reviewing prior accounts of judges as policy makers and/or instruments, it is important to understand how the status of congress' ability to create and change policy can increase the significance of judicial environmental policymaking power. Klyza and Sousa (2008) introduce a trend that has occurred between 1990 and 2006 that involves interested environmental stakeholders perceiving the courts as "important venues in which to achieve central policy goals" (154). The reason for this confidence in the courts to achieve policy goals is "legislative gridlock" (Klyza and Sousa 2008, 154). Clayton (2002) provides justification for this trend by describing judges as the default avenue for successful policy examination because the other two branches are unable to "solve policy disputes" (77). These disputes will remain unresolved as long as the executive and legislative branches remain polarized (77-78). Fiorina (2005) provides evidence of increased polarization by citing PEW research data that indicates an increase in "absolute differences between Democrats and Republicans" beginning in 2002 (38-39). Gridlock also increases the probability that judicial decisions regarding environmental policy stand because a divided congress cannot reach agreements with respect to changes that should be made to the policy that has been reshaped by the judiciary (Klyza and Sousa 2008).

Another reason is stated by Layzer (2012) who adds that congress has added "provisions" that have allowed parties to achieve standing which is the damage claim necessary to be heard by federal courts (12). Klyza and Sousa (2008) provide a specific case that opened the door for parties to achieve standing for environmental cases by citing the Supreme Court case *Sierra Club* v. *Morton* (1972) where the court stated that environmental damages that will affect people in the future may be enough for a group to achieve standing (156). The expanded interpretation of standing by the courts encourages environmentally interested actors to utilize the judiciary in order to further their environmental policy agenda. Both gridlock and broad justifications for standing have increased the use of federal courts to resolve environmental policy disputes. This section will now focus on how judges shape policy, and are used to shape policy by interested actors.

With respect to circuit court judges strategically deciding cases in order to preserve or change policy, the literature focuses on the dynamic of three judge panels. Cross and Tiller (1998) found that the likelihood of a panel that consists of three judges with similar "assumed policy positions" relying on doctrine is low when the doctrine opposes the panels policy preference (2161). Under Cross and Tiller's (1998) scenario, a panel majority that opposes the policy implications that would exist if the panel relies on doctrine will likely render a decision that moves away from jurisprudence and apply new standards based on policy preference. The study also focused on the *Chevron* deference described in section two of this chapter instead of relying on the broader category of doctrinal deference, and Tiller and Cross (1999) relied on the same use of *Chevron* deference in their work. The studies (Cross and Tiller 1998; Tiller and Cross 1999) found that a panel that possesses a consensus with respect to policy preferences will

only grant *Chevron* deference thirty three percent of the time when the panel disagrees with the scrutinized doctrine's policy implications (2173, 230).

Conversely, a panel that agrees with the policy implications of the disputed doctrine has a "high" probability of deferring to the doctrine (Cross and Tiller 1998, 2161). When assessing *Chevron* deference, both studies (Cross and Tiller 1998: Tiller and Cross 1999) found that the same type of panel will grant deference eighty one percent of the time (2173, 230). The specific uses of *Chevron* deference observed by Cross and Tiller (1998) and Tiller and Cross (1999) match the findings of Miles and Sunstein (2008) who found that panels composed of judges with similar policy preferences would strike down agency interpretations of environmental law if the interpretations differed from the panel's political positions (846). The study's evidence of strategic policy shaping was based on three judge panels that consisted of judges who shared policy position consensus. This basis parallels the work of Cross and Tiller (1998) and Tiller and Cross (1999) because all three studies examine three judge panels. Evidence with respect to panel majorities applies to panels that consist of three judges with similar policy preferences.

The behavior of a three judge panel is more complex when the panel is split two to one with respect to policy preference. When a panel faces a two to one split with the majority of the panel possessing a policy preference that opposes the doctrine, the panel has a sixty-one percent chance of granting *Chevron* deference to the agency's interpretation of the doctrine (Cross and Tiller 1998, 2173). The justification for the increased deference by a panel that has the power to deny deference is called the "whistleblowing effect" by Cross and Tiller (1998, 2155). The study argues that the presence of a "whistleblower" would expose the majority's intentions of "disobeying doctrine" to forward a policy agenda, and through a chi-square test, found that the

"obedience towards legal doctrine" exercised by an un-unified panel was correlated with the presence of a "whistleblower" (2172-2173). Bowie and Songer (2009) provide an account of judicial life that reveals opportunities for "whistleblowing" because the study states that appellate judges do communicate and bargain with respect to case outcomes (394). Tiller and Cross (1999) describe the "whistleblower" doctrinal deference as "forced" upon the majority by the judge who has a differing policy opinion (230). This forcing of an issue stance onto the majority is the judicial bargaining described by Bowie and Songer (2009).

The "whistleblower" theory weakens judicial policy shaping power by panel majorities because it demonstrates that a panel that has a majority policy preference cannot always rule outside of doctrinal constraints. However, Cross and Tiller (1998) focused solely on the D.C circuit from 1995 to 2005. The limited coverage of appellate court cases does not allow for an account of greater national judicial policy shaping tendencies or how other regional circuits exercise majority power. This gap is significant due to the claim by Carp and Stidham (1998) that describes judicial policy shaping as "regional" (21). The limited coverage of whistleblowing leaves a gap in the literature because from an environmental policy standpoint, studies do not consider panel majorities that are attached to regions that lead the nation in fossil fuel production. These majorities may be motivated to disobey doctrine regardless of whistleblowing in order to promote regional economic stability. Furthermore, Judge Wald (1999) contends that the protests of minority judges regarding the panel majority's decision do not sway the majority to change their mind. According to Wald (1999) the discussions that are conducted between a heterogeneous panel of judges will often lead to more extreme case outcomes. This statement applies to outcomes in general and does not apply to one specific ideological or political trend. Wald's account refutes whistleblowing and empowers the three judge panel majority to shape

environmental policy by either relying strictly on doctrine or wholly disregarding doctrine. Under the conditions of legislative gridlock, appellate judges who find themselves unified in the form of a three judge consensus or two judge majority can re-affirm, or create environmental policy that has the potential to remain in effect for a long period of time.

A result of increased judicial policy power has prompted presidents to strategically appoint judges who share similar political attitudes. Tiller and Cross (1999) broadly identify presidential appointments as strategic. Carp and Stidham (1998) describe the Presidential appointment of judges as "political statements" (79). The potential for presidents or political actors in general to identify a prospective judges political preferences is strong because over half of federal judges were "politically active" before they were appointed, and with respect to presidents specifically, ninety percent of federal judges shared the same party affiliation (Carp and Stidham 1998, 75). The policy agenda that a President is attempting to forward through strategic judicial appointments is able to remain for a long period of time, well past the president's maximum time in office (Tiller and Cross 1999, 218). Though presidential appointment strategies are a prominent way that political actors use the courts as policy shaping tools, agencies also use the courts to forward policy agenda's.

It is also important to consider the public and their opinions with respect to environmental policy. Public opinion is a force that can strategically be utilized to influence the courts and their decisions. Klyza and Sousa (2008) claim that the public has "no overwhelming concern about environmental degradation" (27). This relaxed attitude towards the environment does not go unnoticed by judges. Carp and Stidham (1998) state that judges have a "keen sensitivity" towards public opinion at the "local" level (137). The local nature of public

opinion's influence on the judiciary infers that different regions have variations of public opinion and the judges within each region will decide cases in a manner that matches their public's issue stances. Carp and Stidham (1998) continue by describing judges as "obliged to consider the attitudes and values of the public" (138). One channel for the judges to review public attitudes toward a particular case is the media.

Robbenault and Studebaker (2003) found that media reporting "affects the outcome of court cases" (23). Though the focuses on trial courts and notes that further investigation of this relationship is needed, specific accounts of media's portrayal of environmental cases supports the study's claim that media coverage affects court decisions. Klyza and Sousa (2008) provide an account of a case in Arizona where a district court found in favor of a plan that would permit the construction of a High School on land that fostered the pigmy owl. The plan was protested by the group Defenders of Wildlife (166). The media's coverage portrayed the case as one that pinned "[kids versus owls]" which portrays the Defenders of Wildlife as a group that viewed nature's well-being as more important than that of the kids (166). Descriptions of environmental cases that resemble that of the Arizona case give judges a perception of the public that is either pro-environmental or pro-development; combined with Klyza and Sousa's account of the public as unconcerned with environmental degradation will subject judges to public support for development. The "sensitive" judge described by Carp and Stidham (1998) will be influenced by the public's lack of concern for the environment.

This review began by describing the theory of legal realism and how it has opened the door for studies that examine how judges apply factors outside of the law to their decisions. By describing the attitudinal model that is a product of legal realism, this review highlighted how the

model's reliance on ideology and partisanship as the sole factors that motivate judicial decision-making omits specific values that could motivate judges to make particular decisions regarding the environment. Examples of these values were provided in the Environmental Values section. The account of how judges can shape policy strengthens the significance of this study because it described the policy implications that a judge's application of values to his or her decisions could change environmental policy for a substantial amount of time. This study will continue by exploring the question "does the regional location of a court affect the way that the judges in that region decide fossil fuel cases?"

This question is derived from the case studies of Klyza and Soussa (2008). The question will first by observed through the hypothesis that courts located in regions that engage in significant fossil fuel production have a significant probability of finding in favor of the fossil fuel industry at the expense of the environment with a large-N logistic regression analysis. The second hypothesis tested is that judges who are located in regions that engage in significant fossil fuel production will not only find in favor of the fossil fuel industry, but also express the cornucopian values described by Layzer (2012) and Wapner (2010). This hypothesis will be tested with a comparative case study. The criteria used for both tests are described in the next chapter.

Chapter 3: Methodology

Research Hypotheses

The methods applied in this study will test two hypotheses. The first hypothesis is that the regional location of Federal Circuit Courts of Appeal affects the way courts find in favor of or against the environment in fossil fuel cases. The independent variable (X) is court location and the depended variable (Y) is fossil fuel case outcome. The predicted outcome is that courts located in regions that rely on fossil fuel production for economic benefit are more likely to find in favor of the fossil fuel production industry at the expense of the environment than courts that are not located in regions that rely on fossil fuels for economic stability. The diagram for Hypothesis 1 is as follows:

Court is Located in a Region that Engages in Significant Fossil Fuel Production → High Probability that the Court will render an Anti-Environmental Decision When The Case Involves the Fossil Fuel Industry

(X) (Y)

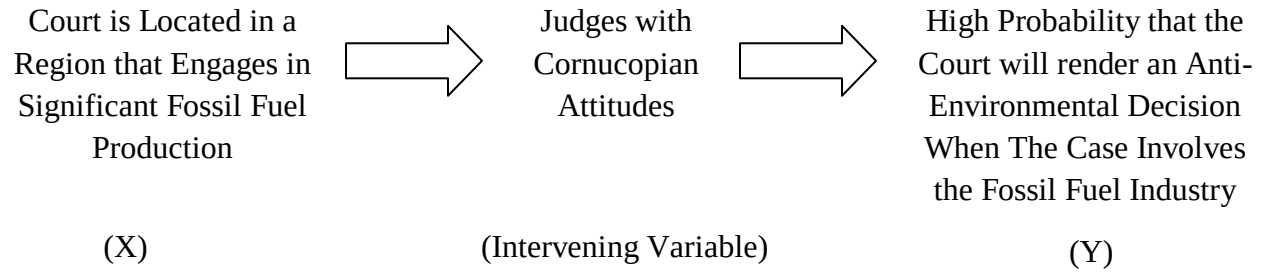
Panel Composition=Control Variable

Court is Located in a Region that Does Not Engage in Significant Fossil Fuel Production → High Probability that the Court will render a Pro-Environmental Decision When the Case Involves the Fossil Fuel Industry

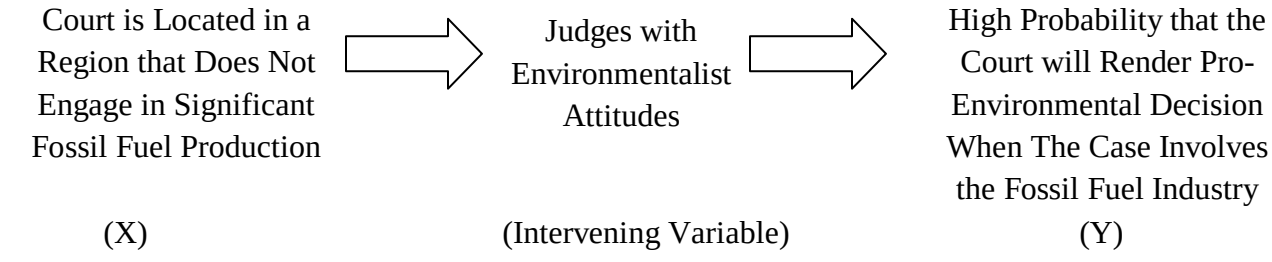
(X) (Y)

Panel Composition=Control Variable

The second hypothesis is that the regional location of a Federal Circuit Court of Appeals induces certain pro- or anti-environmental values into a judge's personal decision making preferences which then cause the judges to render a decision that leads to a particular fossil fuel case outcome. For example, a judge who presides over a circuit that is located in a region that relies on fossil fuels for economic stability is more likely to possess anti-environmental values that cause him or she to render an anti-environmental decision than a judge that presides over a circuit that does not rely on fossil fuels for economic stability. The independent and dependent variables in Hypothesis 2 mimic the variables observed in Hypothesis 1. However, pro- or anti-environmental values are added as an intervening variable. The diagram for Hypothesis 2 is as follows:



Panel Composition=Control Variable



Panel Composition=Control Variable

Dependent Variable Definition

Fossil fuel case outcome will be categorized as environmental or anti-environmental based on the appellate court's judgment and the party that is challenging the EPA statute. Though case outcome fits into one of two categories, multiple scenarios can lead to a particular classification. If the circuit court affirms the lower court's interpretation of the challenged EPA statute when the challenging party is an environmental interest group, then the outcome is categorized as anti-environmental because the court is rejecting the interest groups pro-environmental arguments. If the circuit court grants *Chevron* deference to the EPA's statutory interpretation under the same case circumstances, then the outcome will be categorized as anti-environmental. An anti-environmental categorization will also be assigned to circuit court judgments that reverse lower court EPA statute interpretations when the challenging party represents the fossil fuel industry. Though the situation is unlikely due to the characteristics of appellate courts, anti-environmental categorizations will also be granted to any cases that result in a Circuit court approving fossil fuel production at the expense of the environment.

With respect to pro-environmental case outcomes, a case that involves a Circuit court affirming the lower court's interpretation of an EPA statute that is challenged by a representative of the fossil fuel industry will be categorized as pro-environmental. When a circuit court reverses a lower court's interpretation of an EPA statute that is challenged by an environmental interest group, a pro-environmental classification is given to that case respectively. With respect to Chevron deference, deference granted to the EPA's statutory interpretation is classified as pro-environmental when the statutory interpretation is challenged by the fossil fuel industry. The multiple circumstances that lead to a case being classified as pro- or anti-environment ultimately

produce one of two potential classifications. These independent variable categories will be quantified.

Independent Variable Definition

The regional location of the Federal Circuit Courts of Appeals is based on each circuit court's jurisdictional boundaries. For example, the Third Circuit Court of Appeals' regional location consists of Pennsylvania, New Jersey, and Delaware as shown in *Figure 2*. As a result, there are thirteen courts included in the study. They are the eleven Federal Circuits, the D.C. Circuit, and the Court of Appeals for the Federal Circuit. Each circuit has jurisdiction over particular states except for the D.C. Circuit and the Court of Appeals for the Federal Circuit. The justification for the inclusion of the D.C. and Federal Circuits is that both courts hear fossil fuel cases and consist of judges who will not be attached to the benefits that fossil fuel production provides the regions they represent. This lack of regional attachment is due to the fact that the Federal Circuit has jurisdiction over the entire country, and Washington D.C. is not a region that engages in significant fossil fuel production. Refer to *Figure 2* for a detailed map of the jurisdictional boundaries of the Federal Circuit Courts of Appeal.

In order for a circuit to be considered a region that engages in significant fossil fuel production, over half of the circuit's population must live in states that lead the nation in average annual fossil fuel production between 2001 and 2010. In order to be a leading fossil fuel producer, a state must rank among the top ten in one or more of the three fossil fuel categories. The fossil fuel categories observed in this study are crude oil, coal, and natural gas. Any case that contests use of a natural resource for energy purposes that is coded as an "oil and gas" case by *Findlaw* will also be considered for the study. The circuits that do not have a majority population

living in top fossil fuel producing states are categorized as regions that are not fossil fuel significant. All fifty states are represented by the circuit courts examined in the study.

Figure 1.

State	Natural Gas (Billion Btu)	Coal (Billion Btu)	Oil (K Barrels)
Alabama	328794.6	483765.6	7775.1
Alaska	503629	23312.6	295320
Arizona	438.4	223319.9	50.9
Arkansas	354073.2	585.6	6452.1
California	354045.7	NA	230128.4
Colorado	1283293	757891.3	24671.9
Connecticut	NA	NA	NA
Washington D.C	NA	NA	NA
Delaware	NA	NA	NA
Florida	4643.9	NA	2567.6
Georgia	NA	NA	NA
Hawaii	NA	NA	NA
Iowa	NA	NA	NA
Idaho	NA	NA	NA
Illinios	694.3	750102.5	10138.3
Indiana	3392.6	791024.2	1832.8
Kansas	449534.4	4838.3	36064.8
Kenkucky	106435.2	2902905	2609
Loiusianna	1711866	53060.4	80558.1
Massachusetts	NA	NA	NA
Maine	NA	NA	NA
Maryland	39.4	97155	NA
Michigan	239450.5	NA	6338
Minnesota	NA	NA	NA
Missouri	NA	8874.5	96.5
Mississippi	112332.3	32375.1	20284.8
Montana	102433.3	732656.6	26580
North Carolina	NA	NA	NA
North Dakota	74441.6	392790.3	49936.9
Nebraska	1777.1	NA	2498.2
New Hampsire	NA	NA	NA
New Jersey	NA	NA	NA
New Mexico	1719330	490061.5	63229.8
New York	45470	NA	264.4
Nevada	5.1	NA	466.2
Ohio	93292.7	588847.1	5162.5
Oklahoma	1912284	33923.9	65663.9
Oregon	783.1	NA	NA
Pennsylvania	231325.6	1612896	2580.5
Rhode Island	NA	NA	NA
South Carolina	NA	NA	NA
South Dakota	1297.4	NA	1454.8
Tennessee	3388.1	68167	296.1
Texas	6559583	558017.3	403175.5
Utah	370088.8	547023.1	18065.5
Vermont	NA	NA	NA
Virginia	113269.7	716754.3	17.4
Washington	NA	47409.2	NA
Wisconsin	NA	NA	NA
West Virginia	251743.3	3724146	1678.1
Wyoming	2025707	7216712	53400.7

Data provided by the United States Energy Information Administration (EIA)

The top fossil fuel producing states were identified by using online databases. The data used in this study can be found in *Figure 1.* Natural gas data was available through the EIA's "All Production Estimates" table within the administrations "State Energy Data system" (U.S. Department of Energy, 2012). The category examined within the datasheet was "Natural Gas Marketed Production" (U.S. Department of Energy, 2012). After calculating the average annual "Natural Gas Marketed Production" for all fifty states and Washington D.C. from 2001 to 2010, the top ten natural gas producing states were Texas, Wyoming, Oklahoma, New Mexico, Louisiana, Colorado, Alaska, Kansas, Utah, and Arkansas respectively (U.S. Department of Energy, 2012). Coal production is also available within the same "All Production Estimates" datasheet under the "Coal Production" category (U.S. Department of Energy, 2012). By again calculating the average annual production for each state, it is established that the top ten coal producing states from 2001-2010 were Wyoming, West Virginia, Kentucky, Pennsylvania, Indiana, Colorado, Illinois, Montana, Virginia, and Ohio respectively (U.S. Department of Energy, 2012). See *Figure 1* for the state natural gas data.

Crude oil production was also calculated using EIA data, but the data was obtained from a different data page. The page is labeled "Crude Oil Production" and the measurement category is "Annual-Thousand Barrels" (U.S. Department of Energy, 2012). The years considered were 2001 to 2010. The leading crude oil production states were Texas, Alaska, California, Louisiana, Oklahoma, New Mexico, Wyoming, North Dakota, Kansas, and Montana respectively (U.S. Department of Energy, 2012). The states observed under the three fossil fuel categories are dispersed throughout eight different circuit court regions, but not all regions are considered significant with respect to fossil fuel production. See *Figure 1* for state oil data.

Figure 2.

This map displays the jurisdictional boundaries of the eleven Federal Circuit Courts of Appeals and the D.C. Circuit. Missing from the map are Puerto Rico (First Circuit), Guam (Ninth Circuit), The Northern Mariana Islands (Ninth Circuit). and The U.S. Virgin Islands (Third Circuit).

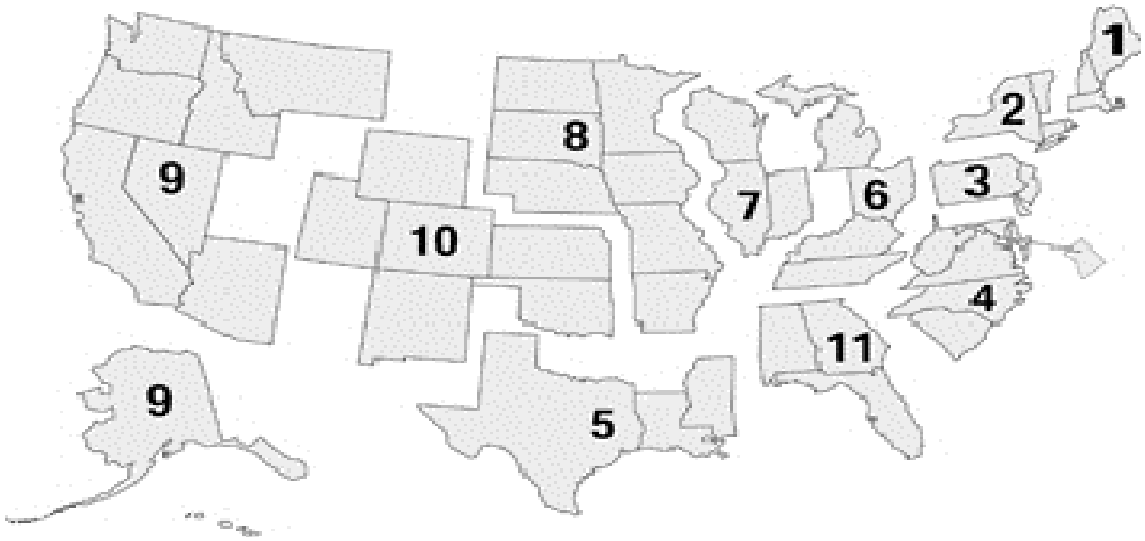


Image Provided by Business Management Daily, a division of Capitol Information Group, Inc.

Using 2010 Census data, the populations of each leading fossil fuel producing state were observed and compared to the overall population of the state's circuit court region. As a result of this method, the circuit regions that engage in significant fossil fuel production are the Third (PA, NJ, DE), Fifth (TX, LA, MS), Seventh (IL,IN,WI), Ninth (AZ,AK,CA,HI,ID,MT,NV,OR, WA), and Tenth (CO,KS, NM, OK, UT,WY) (U.S. Department of Commerce, 2012). See *Figure 2* for a detailed map of jurisdictions. The First, Second, Fourth, Sixth, Seventh, Eighth, Eleventh, D.C., and Federal circuits make up the regions that do not engage in significant fossil fuel production. Though Kentucky (coal), Ohio (oil), West Virginia (coal), and Virginia (coal) did engage in significant fossil fuel production from 2001 to 2010 the states did not have populations that were large enough to place the majority of their circuit court regions' total population in significant fossil fuel states. See *Figure 1* for state fossil fuel data.

Individual Case Coding

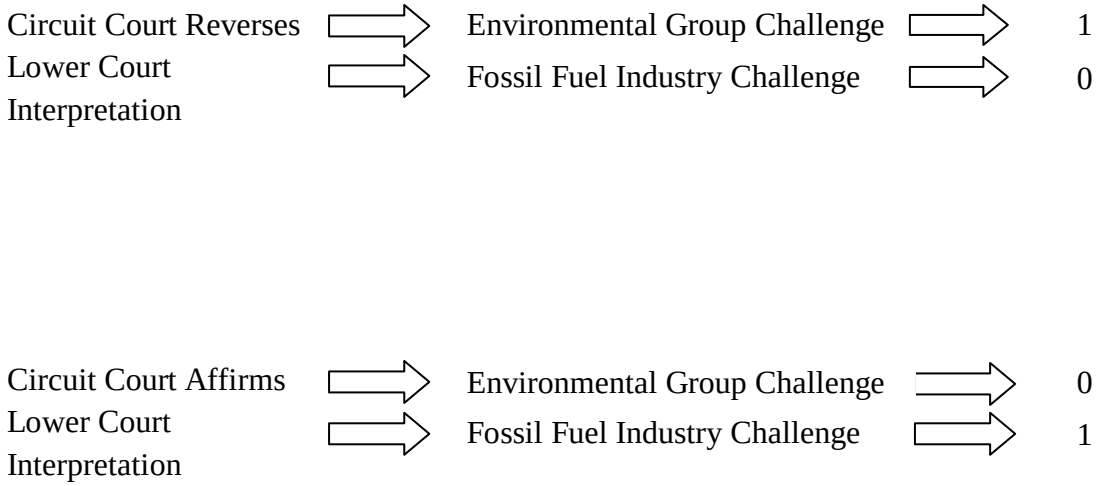
The case population is derived from a Findlaw.com database (Findlaw.com, Thomson Reuters). The database provides both "environmental law" and "oil and gas law" case categories for each of the twelve circuit court reserves (Findlaw.com, Thomson Reuters). In order to be included in this study's case population, the cases must be labeled under both of the previously stated case categories. The population will consist of cases that were decided from the year 2001 to the year 2010 which are observable through the *Findlaw.com* "date range" search engine category (Findlaw.com, Thomson Reuters). The decade observed in this study will capture the polarization spike observed by Fiorina (2005) in order to observe judicial behavior under tight legislative gridlock. The Circuit courts considered in this study include circuits one through eleven, the D.C. Circuit Court of Appeals, and the Federal Circuit Court of appeals. The previously stated population criterion leaves the study with seventy cases.

Case outcome will be coded in a manner that matches the methodology of Revesz (1997) because like Revesz, this study will score case outcomes in a binary manner. See *Figure 2* for specific value classification scenarios. However, instead of exclusively scoring the decisions of Democratic and Republican courts, this study will first score the decisions of courts located in regions that rely on the fossil fuel industry and regions that do not share the same fossil fuel reliance. With respect to the case outcome variable, when the circuit court affirms a lower court interpretation that is challenged by the fossil fuel industry, then the decision receives a score of one (Revesz 1997, 1757). There are also reversals that warrant a score of one. If the circuit court reverses a lower court interpretation that is challenged by an environmental interest group, then the case will also receive a score of one.

Anti-environmental scores of zero are also given to affirmations and reversals (Revesz 1997). When the court under analysis affirms a lower courts' interpretation that is challenged by an environmental group, the case will receive a score of zero (Revesz 1997, 1757). If the circuit court grants Chevron deference in the same situation, a code of zero is given (Czarniak 2008; Miles and Sunstein 2008). With respect to cases that result in the circuit court reversing lower court interpretations, a zero score will be given when the reversed interpretation was challenged by the fossil fuel industry (Revesz 1997, 1757). When assessing case outcome, both affirmations and reversals can be either pro-environmental decisions or anti-environmental decisions depending on the party that is challenging the interpretation or application of a statute.

The panel partisanship control variable for each judge is coded based on the partisan affiliation of the president who appointed each judge respectively. The presidential appointment history that is utilized to determine the partisan appointment of each judge is provided by the *Federal Justice Center* online database (Federal Judicial Center, 2012). If the appointing President of a judge is, or was, a Democrat, then that particular judge will be coded as a Democrat. Democratic panels will receive a score of one and Republican panels will receive a score of zero. The codes will serve as a binary control variable for the regression analysis. The partisan codes are based on panel majority. For example, a three judge panel with two or three Democratic judges will receive a score of one.

Figure 3.



** The arrow diagrams outline variable definition criteria for the study. Scores of 1 are pro-environmental and scores of 0 are anti-environmental.*

Logistic Regression Analysis

In order to test Hypothesis 1, this study will examine differences between courts located in significant fossil fuel regions and courts located in insignificant fossil fuel regions with respect to the probability that each court category will find in favor of or against the environment. In order to determine the probability that a court will find in favor of or against the environment, the quantitative method utilized is logistic regression. Logistic regression analysis is used in this study because the dependent variable (environmental case outcome) is binary, having only a score of zero or one. A score of one indicates that the court's decision resulted in a pro-environmental outcome. A score of zero indicates that the court rendered a decision that is anti-environmental. The independent variable (regional location of a court) is a dummy variable that will be granted a score of either zero or one as well. A score of zero indicates that the region that a court is located in is a significant fossil fuel region, and a region that is not significant with

respect to fossil fuel production will receive a score of one. The equation for the logistic regression is as follows:

$$E(Y) = [1 \times P(Y=1)] + [0 \times (P = 0)] = P(Y =1)$$

The formula P(Y=1) is the expected independent variable, and represents the probability that dependent variable equals one, or the probability that the appellate court decision is one that favors the environment. The probability of a court finding in favor of the environment is expected to be higher when the dependent variable (court location) represents federal circuit courts that are located in regions that do not engage in significant fossil fuel production. The probability score will be calculated through a linear probability model. The formula for the model is as follows:

$$Y=X_1b_1+X_2b_2+\ldots$$

The room for additional binary dependent variables that logistic regression analysis provides allows for considerations of partisanship and panel composition as control variables by adding or removing them from the equation.

Court location will serve as a dummy variable in the logistic regression. The use of a dummy independent variable fits the model for Hypothesis 1 because court location is categorical. Courts can only be located in a region that is categorized as significant or insignificant with respect to fossil fuel production. By considering the categorical independent variable (court location) as a dummy variable, the categories can be converted to numerical scores for the logistic regression analysis. Court location, like fossil fuel case outcome, is also binary because as a dummy variable, court location can only receive a score of one or zero. A

score of zero indicates the presence of a court location that is subject to significant amount of fossil fuel production while a score of one indicates the absence of a court location that is subject to significant fossil fuel production. The regression is conducted through the program *Statistical Package for the Social Sciences* (SPSS). It is expected that the logistic regression will reveal a significant positive relationship between the regional location dummy variable and case outcome. This result would indicate that the probability of a pro-environmental decision is higher when a court is located in a region that does not engage in significant fossil fuel production than when the court is located in a region that engages in significant fossil fuel production. If the expected result is evident, courts located in regions that engage in significant fossil fuel production would make anti-environmental decisions at a higher probability level than those that are not located in significant fossil fuel producing regions. The next section describes the comparative case study analysis that will be used to test the second hypothesis.

Case Study Criteria

Hypothesis 2 will be tested with a comparative case study. Two cases will be selected from the population based on the following case selection criteria. One case will be selected from a significant fossil fuel production circuit and one case will be chosen from an insignificant fossil fuel producing circuit. Both cases will involve the same fossil fuel. The judicial panels of each case will also resemble each other with respect to ideology alignment. Both cases must have the same 3-0 or 2-1 ideology majority. Ideology will be identified by implementing the strategy of Segal and Cover (1989) by interpreting newspaper articles. Ideally, the articles will be published before the judge being observed is confirmed by congress as an appellate justice (Segal and Cover 1989, 559). Words that will be coded as "liberal" include, but are not limited to," support

for the rights of "criminal defendants, women, racial and ethnic minorities," and environmental justice (Segal and Cover 1989, 559). "Conservative codes will involve what Segal and Cover (1989) describe as "the opposite" of what are considered "liberal codes" (559). The classifications will range from conservative to liberal with neutral articles being considered moderate samples because they include both liberal and conservative words or provide no evidence of ideological cues (Segal and Cover, 1989, 559). The database consulted for the editorials is *LexisNexis.*

Case Study Analysis

The comparative case study will compare the amount of environmental and anti-environmental values considered by the courts. The values observed are the environmental and "cornucopian" terms described in Chapter 2 (Layzer 2012). Unlike content analyses that focus on the amount of times certain words are used in a document, this study will focus on the logic applied by the courts through their opinions. Content will be considered in a way that allows the study to identify the significance that each term has with respect to the actual court decision. This style eliminates a miscalculation due to strict reliance on content. For example, a court may cite environmentalist language throughout an opinion, but ultimately use one cornucopian phrase that serves as the ultimate justification for a court's anti-environmental decision. Traditional coding analysis will miss this nuance and therefore a logic based analysis is necessary.

The terminology examined will be rooted in Layzer's (2012) environmentalist and cornucopian definitions that were examined in Chapter 2. To locate environmental and cornucopian ideals, content that uses the terms harm, damage, loss, detriment, deficit, limit and other words that signify harm will be identified. Next, the context that the words are used will be

determined. If the harm is being inflicted on the environment in the eyes of the court, then the phrase will be deemed environmental. If the harm is being inflicted on the economy in the eyes of the court, then the phrase will be deemed cornucopian. Any language that describes resources as scarce, limited, and in need of protection will be deemed environmental because the terms provide evidence of conservationist and/or preservationist beliefs. Again, these terms will be identified, but their significance will be determined by observing the way the judges apply each term logically to their decision. The predicted outcome is that the opinion that comes from a region that engages in significant fossil fuel production will apply cornucopian ideals to the cases' outcome while the opinion that comes from a region that does not engage in significant fossil fuel production will apply environmentalist ideals to the cases' outcome.

The analysis will also consider the way justices balance the use and consideration of the values. Examples of phrases that will be considered are provided by Layzer's (2012) case study on snowmobile use in Yellowstone National Park. Though the study is not a fossil fuel case, it provides an analysis of judicial language that balances environmental and "cornucopian" values (Layzer 2012). In the snowmobile case, District Judge Clarence Brimmer stated that the snowmobile industries use of "advancements in technology that will reduce pollution" was enough to allow economic benefit outweigh any environmental harm that snowmobile use could cause to Yellowstone employees and patrons (Layzer 2012, 229). In this case, Judge Brimmer relied on technology optimism to control his decision. Balancing understood value is one way that judges can logically apply environmental and cornucopian ideals in an opinion. The belief that is ultimately used to formulate a decision by outweighing other beliefs is the one that will be identified as the pro- or anti-environmental theme that defines the opinion. Other applications of values to the logic behind an opinion will be identified by characterizing how significant

particular phrases are to a particular opinion. This method relies on the observers' ability to identify the logic behind a judicial opinion, however the previously mentioned problems that arise from applying strict content coding to judicial opinions necessitates the selected method.

It is expected that the panel that is sitting in a court that is located in a region that engages in significant fossil fuel production will apply cornucopian values when it is unable to use the law to reach its desired outcome if the desired outcome is anti-environmental. If the outcome is pro-environmental, it is expected that the case study will reveal that the court was constrained by the law to reach its decision. On the other hand, if the court is located in a non-fossil fuel region, it is expected that the panel will use environmental values when doctrine cannot be utilized to achieve the desired outcome if the desired outcome is in favor of the environment. If the outcome is anti-environment, it is expected that the court was constrained by the law to reach its decision. The following chapter will first examine the effect that regional location has on fossil fuel case outcome by using regional location as a dummy variable in a logistic regression analysis.

Chapter 4: Large-N Data Analysis

The first hypothesis that is tested to examine the question "Does the regional location of the Federal Circuit Courts of Appeal affect the way the panels find in favor of the environment or fossil fuel production when the case involves fossil fuel production?" is Hypothesis 1. Hypothesis 1 states that courts located in regions that engage in significant fossil fuel production have a high probability of reaching an anti-environmental outcome when the case involves fossil fuels. This chapter will first examine Hypothesis 1 by conducting the large-N logistic regression analysis described in Chapter 3. The discovery of relationships between the variables displayed in Chapter 2 will result in the creation of Chi-Square tables containing the pertinent variables. Though this study seeks to find that partisan/ideological preferences are not controlling with respect to fossil fuel case outcome, the finding of significant relationships between panel partisanship/ideology will result in Chi-Square analysis. The next section will describe the case coding process.

Case Coding

The process of coding the seventy case population resulted in the omission of three cases from the regression analysis. The first omitted case was case thirteen titled *Orange Cty. Water Dist.* v. *Unocal Corp.* The reason that this case has an incomplete code is because the Honorable Justice Sonya Sotomayor, who was originally designated to sit on the panel, was nominated for a seat on the United States Supreme Court. Justices Winter and Cabranes, the remaining two members of the panel were coded as Republican and Democratic respectively which left the case panel code with no political or ideological majority (*Orange Cty. Water Dist.* v. *Unocal Corp.* 2009*)*. The next two cases were not coded for a pro- or anti-environmental outcome. Case

number forty-one titled *Atlanta Gas Light Co.* v. *UGI Utils., Inc.*, is an Eleventh Circuit case that lacked the presence of a party that represented environmental interests. The 2006 case involved the Atlanta Gas Light Co. (Plaintiff) and its attempt to retrieve monetary relief for contamination clean ups from CenterPoint Energy Resources Corporation, UGI Utilities, Inc., and Century Indemnity Company (Defendants) (*Atlanta Gas and Light Co.* v. *UGI Utils.* 2006). Atlanta Gas Company sought monetary relief from Centerpoint and UGI because they previously owned the site that was the cause of contamination. Century was included as a defendant because Atlanta Gas Company claimed that it was owed insurance coverage as a result of Century's previous involvement with the polluting site. This case presented parties that were involved with the fossil fuel industry and financial responsibility rather than environmental interests, therefore a pro-environmental outcome could not be reached.

The third and final case that was removed from the population was case number sixty-three titled *In re: The Exxon Valdez.* The 2009 Ninth Circuit case involves an assessment of interest and other costs that are owed as a result of the 1989 Exxon Valdez oil spill (*In re: The Exxon Valdez* 2009). Though many plaintiffs are awarded money for the damages that spill inflicted, the court was not in charge of determining the existence of damages, but merely had to decide the amount of money that plaintiffs would receive in accordance with a Supreme Court decision on the matter. No ruling on the existence of environmental damage or responsibility for environmental damage was present in the case.

Logistic Regression Analysis and Results

The removal of the three cases from the population leaves the study with a sixty-three case population that is displayed in *Figure* 3. *Figure 3* also displays that the removed cases made

up 4.3 percent of the original case population. The variables observed have one word titles that are consistent throughout the data tables. Case outcome distributions will contain the word "outcome" in their titles. The independent variable "court location" is labeled "region" and the "panel ideology" control variable is labeled "panel." Both of the variables were added to the SPSS binary regression table as covariates and the results of the binary logistic regression analysis are as follows. It is expected that the logistic regression will reveal a significant positive relationship between regional location and case outcome. The binary codes for each variable include a score of zero for regions that engage in significant fossil fuel production, panels that represent a Republican/conservative majority, and anti-environmental case outcomes. Scores of one represent regions that do not engage in significant fossil fuel production, Democratic/liberal panels, and pro-environmental case outcomes.

Figure 4.

Selected Cases	**N**	**%**
Included in The Study	67	95.7
Removed from Analysis	3	4.3
Total	70	100
Unselected Cases	0	0

**The above table provides an official breakdown of the population including the removal of incomplete cases.*

The classification tables located in *Figures 5* and *6* display the percentage of outcomes that are accurately predicted with and without the presence of the court location and panel composition variables. The percentage of successful case outcome predictions is 58.2 when court location and panel composition are not considered as displayed in *Figure 5*. The next pertinent

observation is the comparison the percentage of correct case outcome predictions that are found in both classification tables. What the comparison of *Figure 6 to Figure 5* displays is a 4.5 percent increase in prediction percentage when court location and panel composition are added to the logistic regression model as covariates. Though the addition of court location and panel composition to the model increases the probability that case outcome will be predicted, court location appears to have a minute level of significance with respect to case outcome prediction. However, the significance of the independent variables must be observed before a strong relationship with case outcome can be determined. A significance level of ninety-five percent or $p<.05$ is necessary for either of the two variables to have a significant relationship with case outcome.

Figure 5.

Observed	Predicted		
	Outcome		Percentage Correct
	.00	1.00	
Anti-Environmental Outcome	39	0	100.0
Pro-Environmental Outcome	28	0	.0
Overall Percentage			58.2

**This classification displays predicted case outcomes without the addition of independent variables*

Figure 6.

Observed	Predicted		
	Outcome		Percentage Correct
	.00	1.00	
Anti-Environmental Outcome	28	11	71.8
Pro-Environmental Outcome	14	14	50.0
Overall Percentage			62.7

**This classification table displays predicted case outcomes when the independent variables are included.*

The variable analysis displayed in *Figure 7* reveals a positive relationship between court location and case outcome with a beta coefficient (β) score of .235. Therefore, a court location score of one which signifies a region that does not engage in significant fossil fuel production is associated with a case outcome score of one or the presence of a case where the court makes a pro-environmental decision. However the significance score for the court location variable is .655. The previously stated *Figure 7* scores represent the scenario where panel composition takes the intended form of the control variable for it is removed from the regression analysis. As a result, the null cannot be rejected with respect to Hypothesis 1 in Chapter 2 because there is no significant relationship between court location and fossil fuel case outcome. However, the fossil fuel cases that have the highest likelihood of resulting in a pro-environmental outcome are those that are heard by a liberal panel in a region that does not involve significant fossil fuel production. Therefore, environmental interest groups and Departments of Environmental Protection that are seeking the regulation of fossil fuel production will enjoy a higher success rate with respect to achieving stricter regulation through case outcomes that limit fossil fuel production in non-fossil fuel regions with liberal panels than in any other region/panel scenario that is displayed in *Figure 7.* Furthermore, the likelihood of a pro-environmental decision is lowest in fossil fuel circuits with a conservative panel. Based on the probability models, panel

composition has the greatest impact on case outcome. However, the largest contrast in case outcomes exists when the panel's partisan/ideological composition score matches the regional location score (e.g. non-fossil fuel (1)/Liberal (1)). This contrast reveals that regional location does enhance the impact that panel composition has on case outcome regardless of whether the outcomes are pro- or anti-environmental.

Figure 7.

	B	S.E.	Wald	DF	Sig.	Exp(B)
Region	.235	.527	.199	1	.655	1.265
Panel	.991	.537	3.406	1	.065	2.694
Constant	-.824	.444	3.452	1	.063	.439

Non-Fossil Fuel Region/Liberal Panel Y=(1)(.235)+(1)(.991)=1.226

Non-Fossil Fuel Region/Conservative Panel Y=(1)(.235)+(0)(.991)=.235

Fossil Fuel Region/Liberal Panel Y=(0)(.235)+(1)(.991)=.991

Fossil Fuel Region/Conservative Panel Y=(0)(.235)+(0)(.991)=0

**The above table includes a breakdown of the statistical significance and relationships of the three variables observed in the logistic regression. The equations below the table represent the probability scores for each case scenario.*

The introduction of panel composition as an exclusive independent variable results in a different regression outcome. A positive relationship is present when panel composition is added as the independent variable due to the β score of .991. When panel composition is observed as an independent variable, the positive relationship signifies that the presence of a panel score of one which indicates a Democratic majority is associated the presence of a case outcome of one or pro-environmental. Unlike the relationship between court location and case outcome, the

relationship between panel composition and case outcome yields a marginally significant score of .065. The score is marginally significant because the p-value is of .065 is less than .10. Though the addition of the control variable into the logistic regression as an independent variable leads to an increased significance, the null hypothesis cannot be rejected. However, when examining the probability equations in *Figure* 6, it is clear that the highest probability of a court finding in favor of fossil fuel production at the expense of the environment exists when the case is heard in front of a conservative panel and located in a region that engages in significant fossil fuel production. Environmental interest groups and Departments of Environmental Protection should expect to achieve the least amount of success when attempting to enhance the regulation of fossil fuel production or limit the powers of the fossil fuel industry if the case is heard by a conservative panel in a fossil fuel significant region. The relationship between panel composition and case outcome does warrant further observation. Analyzing panel composition exclusively may affirm the findings of previous studies that focus on panel partisanship and not court location.

Figure 8 displays a variable analysis of a logistic regression model without the presence of court location as a covariate. The classification table results mirror the results in *Figures 5 and 6.* Again, the percentage of successful case outcome predictions increased from 58.2 percent to 62.7 percent. The fact that the same increase in the percentage of successful case predictions is present in both logistic regression models reveals that court location provides little aid in the prediction of case outcome. The significance of panel composition in the logistic regression model that excluded court location entirely changed to .072 as displayed in *Figure 8,* but the decrease in level of significance still renders the relationship between panel composition and case outcome to be marginally significant. In order to confirm the observation that court location

did no contribute to the 4.5 percent increase in the successful case outcome predictions displayed in *Figures 5* and *6*, a third and final logistic regression was conducted.

Figure 8.

	B	S.E.	Wald	DF	Sig.	Exp(B)
Panel	.934	.519	3.239	1	.072	2.545
Constant	-.693	.327	4.484	1	.034	.500

**The table displays the relationship and significance of the second logistic regression that examines the relationship between panel composition and case outcome.*

The expectation is that the final logistic regression that includes court location as the only covariate will reveal no increase in the percentage of successful case predictions when the classification tables are compared. *Figures 9* and *10* reveal no change in the percentage of correct case outcome predictions when court location is added into the third and final logistic regression model. The lack of an increase in the percentage of successful case outcome predictions confirms that court location did not contribute to successful case outcome predictions regardless of whether panel composition was included or excluded from the logistic regression model. The reason for the increase in the percentage of successful case outcome predictions from 58.2 percent in the first two models and the final model is the addition of case number thirteen into the population. As noted at the beginning of the chapter, the exclusion of case number thirteen from previous models was due to the case's lack of an identifiable panel composition. The outcome and court location were conclusive which allows SPSS to include the case in the third and final model. The level of significance for the court location variable is .958 for the third regression model which is not significant or marginally significant because $p>0.1$. The results of the second and third logistic regression models reveal that the success of an environmental interest group or Department of Environmental Protection with respect to achieving pro-

environmental objectives at the expense of fossil fuel production is dependent on the partisan/ideological preferences of the panel and not the regional location of each court. However, the probability rates displayed in *Figure 6* necessitate further investigation through a *Chi-Square* test.

Figures 9 and 10.

Observed	Predicted		
	Outcome		Percentage Correct
	.00	1.00	
Anti-Environmental Outcome	40	0	100.0
Pro-Environmental Outcome	28	0	.0
Overall Percentage			58.8

Observed	Predicted		
	Outcome		Percentage Correct
	.00	1.00	
Anti-Environmental Outcome	40	0	100.0
Pro-Environmental Outcome	28	0	.0
Overall Percentage			58.8

**Classification tables for the third and final logistic regression examining the relationship between region and case outcome.*

Chi-Square Test

In order to further examine the relationship between panel partisanship and case outcome, the study utilizes a Chi Square analysis. Due to the fact that the three missing cases were deemed incomplete as a result of either a lack of partisan majority or an inconclusive case outcome, the case summary displayed in *Figure 7* matches that of *Figure 4.* The *Chi-Square* table is observed for a significance level of $p<.05$. The probability equations displayed in *Figure 7* revealed that

the highest probability of a case garnering an anti-environmental decision exists when the case involves a conservative panel that sits in a fossil fuel significant region. The *Chi-Square* table displayed in *Figure 11* re-affirms that result. Of the nineteen cases that include courts with conservative panels that are located in fossil fuel significant regions, fifteen resulted in anti-environmental decisions. The eleven case disparities in decision results are the largest among the four region/panel combinations displayed in *Figure 11.* Though the probability of a fossil fuel case resulting in a pro-environmental outcome is highest when the panel is liberal and the case is heard in a region that is not fossil fuel significant, *Figure 11* shows that the increased likelihood of a pro-environmental case does not mean that the majority of fossil fuel cases that are heard under the previously stated region/panel combination will result in a pro-environmental decision.

Figure 11.

Panel		Region		Total
		Fossil Fuel Significant	Non-Fossil Fuel	
Republican/Conservative Panel	Anti-Environmental Outcome	15	13	28
	Pro-Environmental Outcome	4	10	14
	Total	19	23	42
Democratic/Liberal Panel	Anti-Environmental Outcome	6	5	11
	Pro-Environmental Outcome	11	3	14
	Total	17	8	25
Total Outcomes	Anti-Environmental Outcome	21	18	39
	Pro-Environmental Outcome	15	13	28
	Total	36	31	67

**The table above displays the Chi-Square table including case outcome, panel composition, and region.*

As *Figure 11* displays, out of the eight fossil fuel cases that were heard by liberal panels that were located in non-fossil fuel regions, only three resulted in a pro-environmental outcome. Even though the highest probability of a pro-environmental outcome existed when the case was

heard under non-fossil fuel/liberal conditions, the courts were still more likely to find in favor of fossil fuel production than the environment. Though environmental interest groups and Departments of Environmental Protection have the highest probability of achieving their desired pro-environmental outcome in non-fossil fuel/liberal courts when compared to courts that meet one of the other three criteria combinations, the groups will still struggle to achieve their environmental objectives because there is a greater likelihood that the case will still receive an anti-environmental decision. Though the non-fossil fuel/liberal courts do not appear to favor the environment, the fossil fuel significant/conservative courts find in favor of fossil fuel production frequently. This finding warrants an exploration of panel composition and case outcome because panel has a marginally significant effect on outcome.

In order to assess the significance of the four scenarios that the relationship between panel composition and case outcome reveal, the expected frequencies of each relationship are calculated and compared to the observed frequency results displayed in *Figure 9*. The total number of cases that contain a particular panel composition are multiplied by the total number of cases containing a particular case outcome. The result is then divided by the case total.

Figure 12.

Outcomes	Panel		Total
	Republican/ Conservative	Democratic/ Liberal	
Pro-Environmental Outcome	28	11	39
Anti-Environmental Outcome	14	14	28
Total	42	25	67

**The table displays a cross tabulation that reveals the observed frequencies for the four different case scenarios.*

The expected frequency results rounded to the nearest thousandth and equations for the four combinations of panel composition and case outcome are as follows:

Democratic Panel and Pro-Environmental Outcome: (25×28)÷67=10.448
Democratic Panel and Anti-Environmental Outcome: (25×39)÷67=14.552
Republican Panel and Anti-Environmental Outcome: (42×39)÷67=24.448
Republican Panel and Pro-Environmental Outcome: (42×28)÷67=17.552

Though all four expected frequencies differ from the observed frequencies, the two case categories that involve Republican panels provide the largest distinctions between observed and expected case frequencies as shown in *Figure 11* and the previously displayed frequency equation.

Figure 13.

Statistic	Value	DF	Significance Level
Pearson Chi-Square Statistic	3.310	1	.069

**The following tables represent the SPSS results for the two by two Chi Square analysis of the relationship between panel composition and case outcome as well as the symmetric measures.*

The Pearson Chi-Square statistic of $X^2=3.310$ displayed in *Figure 13* was calculated with the following equation $X^2=67[(28)(14)-(14)(11)]^2/[(39)(28)(25)(42)=3.310$. The 2x2 table necessitates the use of one degree of freedom in order to calculate the significance of the statistic under the equation (2-1)x(2-1)=1. The Chi-Square statistic falls between the values of 2.71 and 3.84. The corresponding significance values place $X^2>.05$ and $X^2<.10$. This range matches the .69 level of significance displayed in *Figure 13* and further confirms that the relationship between panel composition and case outcome is marginally significant. The Chi-Square table re-

affirms the marginal significance of the relationship between panel composition and case outcome, but fails to enhance the relationships significance to the $p<.05$ level.

Conclusions

The large-N logistic regression analysis failed to reveal a significant relationship between the regional location of courts and environmental case outcomes. Therefore, research Hypothesis 1 must be rejected in favor of the null hypothesis. However, the analysis reveals that the way in which the courts apply environmental or anti-environmental values to each case within their jurisdiction may differ. There is evidence in *Figures 7* and *11* that suggest something is driving conservative panels that are located in fossil fuel significant regions to almost exclusively find in favor of fossil fuel production at the expense of the environment. The search for an explanation for the large disparity between environmental and anti-environmental case outcomes further motivates the comparative case study that is conducted in the next chapter. It is expected that the opinion for the case that comes from a fossil fuel significant region will contain cornucopian values. In order to assess disparities in the use of cornucopian values the two cases examined must result in anti-environment outcomes. The findings in this chapter with respect to conservative partisan/ideological preferences enhancing the chance of a court finding in favor of fossil fuel production motivates the requirement that both cases observed in the study contain conservative panels.

Since the majority of the cases analyzed in this chapter resulted in an anti-environment outcome, that will be the outcome required for both cases selected for the next chapter. This requirement will allow for an examination of differences between the logic utilized by courts that are located in different regions. It is expected that the case heard by a court that is located in a

non-fossil fuel region will have an opinion that demonstrates the court relying on sound legal interpretation and not cornucopian values to reach an anti-environmental conclusion. This limits the ability to identify the existence of environmentalist values in the manner that is demonstrated in the second arrow diagram on page 53. However, cases with anti-environmental outcomes may still contain environmentalist values. The court often considers various prongs when reviewing a case.

One prong may be interpreted with environmental values, but the culmination of several decisions on several separate prongs may lead the court to reach and anti-environment decision. The case that comes from a non-fossil fuel region is expected to contain some environmentalist values in the form of judges coming up with pro-environmental conclusions for some prongs of the case but ultimately finding in favor of fossil fuel production. Environmentalist values would be expected in dissents in cases form non fossil fuel regions as well, even though the case selection criterion does not guarantee that any selected case will contain a dissent. The next chapter looks at two specific cases in order to evaluate the way in which courts apply environmental and anti-environmental values into their decisions. The case study will observe cases for evidence of the previously diagrammed research Hypothesis 2.

Chapter 5: Comparative Case Study Analysis

In order to test Hypothesis 2, both of the cases selected for this analysis had to result in the same environmental outcomes, consist of panels that share the same partisan/ideological majority, and involve the same fossil fuel. One case must come from a fossil fuel significant region, and the other must come from a non-fossil fuel region. The case selection process led to the selection of *Biodiversity Conservation Alliance* v. *Bureau of Land Management RMT* (*Biodiversity*) from the Tenth Circuit Court of Appeals and *Islander East Pipeline Company LLC* v. *Connecticut Department of Environmental Protection* (*Islander*)from the Second Circuit Court of Appeals. Both cases involve natural gas and therefore meet the fossil fuel similarity requirement noted in Chapter 2. As a Tenth Circuit case, *Biodiversity* is considered a case that comes from a fossil fuel significant region while the Second Circuit case of *Islander* comes from a non-fossil fuel significant region (See Chapter 3). Both cases also include three judge panels that were initially considered conservative because the panels consist of at least two judges who were appointed by Republican presidents. However, a further analysis of the panel was necessary in order to provide more direct links between each justice and his or her perceived partisan/ideological preference. The results of the newspaper editorial analysis described in Chapter 3 provided further links between both panels and their partisan/ideological preferences.

The results of this comparative study are expected to reveal that the *Biodiversity* Court will justify its anti-environmental decision by utilizing cornucopian values. The values are predicted to appear when the standard of review used to assess the case leaves room for the *Biodiversity* Court to infuse values into its opinion. Even if the court that is located in a region that engages in significant fossil fuel production is found to apply cornucopian values in the

predicted manner, more evidence is necessary for Hypothesis 2 to be supported by the case study. The evidence is predicted to be found in *Islander*. The *Islander* Court is not expected to apply cornucopian values when it reaches an anti-environmental decision in its opinion. Though the use of environmental values in *Islander* cannot be expected, it would support Hypothesis 2 because Hypothesis 2 expects courts located in regions that do not engage in significant fossil fuel production to use pro-environmental values more frequently than courts located in fossil fuel-significant regions. There is no fixed amount of cornucopian value usage or lack thereof that is necessary to provide evidence of Hypothesis 2. The strategic use and amount of environmental values will be compared in order to determine if there is a discrepancy in the overall logic of the two decisions.

Biodiversity Conservation Alliance v. *Bureau of Land Management RMT*

The case of *Biodiversity Conservation Alliance* v. *Bureau of Land Management RMT* focuses on the state of Wyoming which is a state that this study deems fossil fuel significant as a result of its natural gas production. As stated in Chapter 3, Wyoming produced the second largest amount of natural gas from 2001-2010. The factual background begins in 2003 when the Bureau of Land Management (BLM) created an amendment to its resource management plan that enabled natural gas exploration in an area called the Powder River Basin (*Biodiversity Conservation Alliance* v. *BLM* 2010). As a result of the BLM's natural gas plan, a group composed of environmental organizations including the Biodiversity Conservation Alliance and Wyoming, residents (BCA et al.) proposed an alternative natural gas plan that would commence natural gas exploration, but in a gradual manner. The proposed alternative involved natural gas drilling in spread out areas of the Powder River Basin (*Biodiversity Conservation Alliance* v.

BLM 2010). Once a drill site is dry, the BLM may only relocate to a new site within the basin once the previously drilled site's "landscape" is restored (*Biodiversity Conservation Alliance* v. *BLM* 2010). The plan proposed by the BCA et al. is one that entails setting aside sections of land for resource extraction while ensuring that the entire Powder River Basin is not destroyed or hastily removed of its natural resources. This concept parallels that of conservationism because the plan permits natural resource extraction in a controlled manner with safeguards that are intended to keep the basin healthy for future resource extraction and ecosystem sustainability.

Though the gradual extraction of natural gas would allow for the gradual exploitation and restoration of the basin, in a manner that could protect the basin as a whole, the BCA et al. acknowledged that the gradual plan would cost the BLM because other fossil fuel parties could "drain federal minerals" by mining the land before the BLM could access it and remove all of the resources before the BLM could obtain them (*Biodiversity Conservation Alliance* v. *BLM* 2010). The loss of profitable minerals is an economic risk that pins businesses against the environment, presenting a situation where the BLM can forward cornucopian values in their arguments. The BLM ultimately decided to forgo any careful consideration of the BCA et al.'s plan. The National Environmental Policy Act (NEPA) 42 U.S.C. § 4332(2)(C) requires the BLM to prepare an environmental impact statement. The environmental impact statement includes a consideration of proposed substitutes for the BLM's. The BCA et al. challenged the BLM's decision not to consider the proposed alternative under the NEPA act. The District Court found that the BLM gave enough consideration to the BCA et al.'s proposed plan and the Tenth Circuit ultimately affirmed the District Court's Decision. An investigation of the logic behind the Tenth Circuit's decision will reveal any use of the cornucopian ideals described in Chapter 2.

Before assessing the Court's decision making process, an analysis of the panel is necessary. Though linking a judge's partisan/ideological background to that of his or her appointing president can accurately predict partisan/ideological affiliations in a broad manner, a specific examination of each judges background will allow for a measurement of the strength of each judges partisan/ideological profile. The judges that presided over *Biodiversity Conservation Alliance* v. *Bureau of Land Management RMT* were judges Jerome Holmes, Paul Kelly Jr., and Terrence O'Brien. All three judges were appointed by Republican Presidents. Judges O'brien and Holmes were appointed by George W. Bush while Judge Kelly was appointed by George H.W. Bush. Newspaper articles about each judge were collected and observed for evidence of each judge's partisan/ideological background in a manner similar to the work of Segal and Cover (1989).

A 2006 article in the *Tulsa World* regarding Judge Homes' nomination revealed evidence of a Republican/Conservative profile (Myers 2006). The article states that Holmes was scrutinized by Democrats during his confirmation hearings because of opposition to affirmative action. The article quotes Senator Edward Kennedy who voiced his opposition of Holmes' appointment based on the judge's approval of the death penalty (Myers 2006). The Oklahoma City-based newspaper titled *The Journal Record* also noted that Judge Holmes "has criticized affirmative action" in the past (Shottenkirt 2006). The qualities displayed in both articles show that Judge Holmes' issue stances do promote the rights of minorities and/or criminals which are Republican/conservative according to Segal and Cover (1989) and this study recognizes him in the same manner.

Judge Kelly's nomination and confirmation was covered in two 1992 articles by the *States News Service*. The first article was published on March 17, and stated that Judge Kelly was a former "Republican Party activist" (Hickox 1992). The second *States News Service* article also noted Judge Kelly's former role as a supporter of the Republican Party (Hickox 1992). The same recognition of past affiliation with a particular political party is evident in the coverage of Judge O'Brien's appointment and nomination. A 2001 *Denver Post* article mentions that the Judge nearly ran for office as a Republican write-in for a position in the Wyoming House (McAllister 2001). The fact that Judge O'Brien served as a District Judge in Wyoming and considered a role in Wyoming politics is important because this case involves the production of natural gas which is a significant economic entity for the State of Wyoming which the Judge would definitely recognize (McAllister 2001). Though no evidence of issue stances were available for Judges Kelly and O'Brien, their previous roles and considerations of roles as members of the Republican Party demonstrate their partisan/ideological allegiances.

The panel before this case is one that consists of Republican/conservative profiles. All three judges are considered to be strong conservative Republicans in this study. Though the articles consulted were not published before each judge was confirmed, they cover the positions and issue stances that the judges possessed and acted in accordance with before their appointments. The effect that the partisan/ideological profile of the panel has on the values found in the case study will be assessed in a comparison with the other case. The remainder of this case study will examine the court's decisions and logic used in the case.

It is important to outline how the court assessed the BLM's consideration of the BCA et al.'s alternative plan. The court had to assess the BCA et al.'s alternative plan in eight different

phases. The first five phases of assessment all deal with the BCA et al.'s argument that even under a gradual drilling plan, "mineral drainage" can be eliminated (*Biodiversity Conservation Alliance* v. *BLM* 2010). The next three phases of assessment deal with separate issue areas that the court must observe when it is faced with the decision of approving or denying the viability of an alternative drilling plan. The court must assess whether the alternative plan presented by the BCA et al. (1) will adequately provide the United States with energy, (2) will allow the BLM to meet alternative project goals, and (3) provide a program that will legitimately aid in the assessment of environmental repercussions (*Biodiversity Conservation Alliance* v. *BLM* 2010). The court's conclusions for all eight phases are assessed for evidence of cornucopian values. The final area of assessment will be the court's concluding statements.

The first area discussed in Justice Kelly's majority opinion involves the BLM's claim that the loss of minerals due to private parties removing them before the BLM can engage in natural gas extraction is unavoidable under the BCA et al.'s proposed plan (*Biodiversity Conservation Alliance* v. *BLM* 2010). The BCA et al. first proposed that the BLM seek financial relief from an alternate party. However, the court concurred with the BLM because the only ways in which the BLM could seek financial relief from "voluntary state and private action" (*Biodiversity Conservation Alliance* v. *BLM* 2010). The court not only mentions the fact that the BLM cannot force others to help them financially, but also states that the state and private parties that could provide financial relief do not have the "incentive" to aid the BLM (*Biodiversity Conservation Alliance* v. *BLM* 2010). The logic behind the court's striking down of the BCA et al.'s first suggested remedy for mineral drainage is rooted in the idea that natural gas is an economic entity and not a component of an ecosystem. By perceiving the mineral drainage as harm to natural gas profit, and not a necessary sacrifice for a sustainable Powder River Basin

ecosystem, the court evaluated the first alternative through a strict cornucopian lens. The court viewed mineral drainage as the very "restriction, limit, or constraint" to profit that Wapner (2010) describes as cornucopian (45).

The next two strategies for eliminating costly drainage involve those who would hold gas leases under the new BLM plan. The first plan involves the BLM forcing lease holders to provide a "protective well" that will stop drainage (*Biodiversity Conservation Alliance* v. *BLM* 2010). The logic applied by the court when dismissing this argument was that the BLM cannot force a lease holder to create a "protective well" if the drainage that the well will stop ultimately causes the lease holder to stop drilling on his or her site (*Biodiversity Conservation Alliance* v. *BLM* 2010). The justification used by the court in this matter was one of practical business logic and not cornucopian. The same lack of cornucopian evidence exists in the court's decision to dismiss the BCA et al.'s claim that financial compensation can be attained by the BLM from lease holders. The court determined that no compensation can be sought by the BLM unless they insist that the lease holders implement a "protective well" which is impossible because the gradual plan proposed by the BCA et al. does not permit the BLM to implement new wells until satisfactory land restoration has occurred on the initial drill sites (*Biodiversity Conservation Alliance* v. *BLM* 2010). The court's logic is based on its interpretation of how the delays of the proposed substitute program will impede the creation of wells and not cornucopian values because no damage due to a lack of profit figured into the decision.

The next aspect of the BCA et al.'s proposed plan that the court considered was unitization. Unitization involves both the BLM and independent drillers working together and splitting the profits of drilling operations (*Biodiversity Conservation Alliance* v. *BLM* 2010). The

Court was quick to dismiss this solution because the independent drillers that "currently profit" from drilling would lose profit if they volunteered to share the land with the BLM. Though the Court does not have the power to force collaboration between the BLM and private groups, it does not consider the environmental benefits of a gradual drilling plan in its logic (*Biodiversity Conservation Alliance* v. *BLM* 2010). The court evaluated both the BLM and independent drillers as profit driven organizations that will suffer economic harm from unitization rather than organizations that had the potential to collaborate and prevent environmental harm from constant and limitless drilling. The court's assessment of the proposed collaborative efforts involving unitization fits into Wapner's (2010) assessment of cornucopian values. Wapner (2010) describes the reluctance of one group to sacrifice because others because there is no certainty that others will do the same as cornucopian (41). The court exercised this very logic when it refrained from making the BLM seek agreements to sacrifice with lessees because it is not certain that the outside parties will agree with the sacrifice and comply.

The fifth remedy for mineral drainage involved the BLM collaborating with the State of Wyoming to enforce rules that postpone independent drilling operations so the BLM would have an opportunity to compete for minerals that would otherwise be drained by the independent drillers (*Biodiversity Conservation Alliance* v. *BLM* 2010). However, the court determined that the State of Wyoming cannot be forced to cooperate with the BLM and therefore the plan is insufficient. The logic of this decision is not cornucopian because the court does not delve into its opinion of whether or not Wyoming would sustain economic harm by forcing independent drillers to delay drilling, but relies on the fact that it cannot legally force Wyoming to comply. The court's assessment of the five options proposed by the BCA et al. contains a mix of

cornucopian and legal logic. The court then moves to its assessment of the gradual drilling proposal's ability to meet energy needs.

After refuting five alternatives to the mineral drainage problem, the court turned to the argument forwarded by the BCA et al. that the gradual drilling process will allow for full resource extraction over time which would still allow the BLM to adequately supply the United States with natural gas. The court found the claim to be false because the gradual drilling would still cause "gas drainage and ultimately reduce the amount of gas that could be mined from the basin (*Biodiversity Conservation Alliance* v. *BLM* 2010). The Powder River Basin is considered federal land that should be mined for resources in a manner that meets national energy needs without time constraints. This logic is cornucopian because the Court views the land as property that the BLM has the right to manipulate for resources in a manner that does not sacrifice profit for the environment. The reasoning of the court defends the BLM's right to alter property because it has the right to meet a goal on the property even though sacrificing some profit will allow the ecosystem that exists on the property to re-develop. Though the argument that the court merely allowed the BLM to exercise its rights to accomplish energy obtainment goals can be made, its conclusion that the loss of gas profit justifies immediate and extensive drilling again shows that profit was prioritized, and the environmental repercussions of the BLM's plan were neglected.

The BLM also concluded that "other purposes" for their proposed drilling plan could not be met under the BCA et al.'s gradual plan (*Biodiversity Conservation Alliance* v. *BLM* 2010). Though the court agreed with the BLM, the reason was that the BCA et al. failed to prove that their alternative would satisfy the goals in a "reply brief" without detailing why the BCA et al.'s

brief was unacceptable (*Biodiversity Conservation Alliance* v. *BLM* 2010). No evidence of cornucopian thinking was apparent in the court's conclusion that the BCA et al.'s alternative plan would not benefit the environment. The BCA et al. argued that the gradual drilling plan would allow the groups to analyze the environmental consequences of the drilling in a comparative manner as a result of the delayed development plan. The court refuted this argument because the gradual program will take "several decades" instead of the ten years proposed by the BLM and would therefore be impossible to compare (*Biodiversity Conservation Alliance* v. *BLM* 2010). Assessing the BCA's ability to compare environmental repercussions based on time and not profit is based on logic that does not rely on cornucopian values. However, the court's concluding statement which appears to reveal the underlying theme behind the courts anti-environmental decision is cornucopian.

The court concludes by stating that the BLM's "Lessees have the right to drill, subject to only reasonable delays (*Biodiversity Conservation Alliance* v. *BLM* 2010). By favoring the lessees over a more environmentally friendly alternative, the court made a decision based on the very "individual liberties" that Layzer (2012) highlights when assessing cornucopian values (4). The profit that the lessees will obtain from the gas lease they arrange with the BLM aids them in achieving material goals and the court's concluding statement shows that it believes the BCA et al.'s alternative plan will serve as a barrier to those goals. Prioritizing the assurance of individual rights to attain "material prosperity" instead of regulating is cornucopian (Layzer 2012, 4). The fact that the resources in the Powder River Basin could still be obtained in their entirety through the BCA et al.'s alternative plan further establishes the panel as cornucopian because it will not even approve the gradual obtaining of material goals when more immediate options are available. The case of *Biodiversity Conservation Alliance* v. *Bureau of Land Management RMT*

presents several situations where the court applied cornucopian logic. Four out of eight assessments that were made by the court were justified with cornucopian values. Theses assessments were based on the court's understanding of the current fossil fuel situation in Wyoming and utilized by the court to justify its decisions when the standard of review allowed for the use logic outside of legal doctrine. Therefore, the Tenth Circuit's use of cornucopian values meets the expectations of this study. The use of cornucopian logic by the Tenth Circuit will later be compared to the following case. The following figure provides a summary of the court's logic.

Figure 14.

Biodiversity Conservation Alliance v. *Bureau of Land Management RMT*

Step of Assessment	Question Reviewed	What the Court Decided	Environmental Value Expressed by the Court
1.	Is financial relief from private industries a viable option for the BLM with respect to mineral drainage prevention?	No, there is no reason to believe that the private industry will sacrifice profit to compensate the BLM.	Cornucopian (regulation harms profit)
2.	Is recommending the BLM to require lessees to create protective wells a legitimate solution for mineral drainage prevention?	No, the precautionary wells may make the lessees land inadequate for drilling in the future.	No evidence of values

3.	Can the BLM rely on forcing lessees to provide financial aid to replace the losses accrued form mineral drainage as a solution to lost profit?	No, financial aid cannot be sought unless a protective well is created.	No evidence of values
4.	Is unitization a viable solution to mineral drainage losses?	No, the collaborative efforts necessary for unitization would cost some groups money which would inflict financial harm.	Cornucopian (unwillingness to sacrifice for the environment)
5.	Is the possibility of the BLM working with the State of Wyoming a viable strategy for the BLM to obtain financial relief from mineral drainage damage?	No, the court cannot force the State of Wyoming to aid the BLM.	No evidence of values
6.	Does a gradual drilling plan allow the BLM to meet the Nation's energy needs?	No, the plan will allow too much energy to be lost due to mineral drainage.	Cornucopian (regulation harms profit)
7.	Would the gradual drilling plan allow the BLM to meet alternative project goals?	No, the BCA et al. failed to properly provide justification for how alternative goals could be met through gradual drilling.	No evidence of values
8.	Will a gradual drilling plan allow the BCA et al. to sufficiently evaluate environmental damage over time?	No, the plan will take decades which is an inadequate timetable for the BCA et al. to reach conclusions.	No evidence of values

9.	Concluding statements	The BLM's lessees cannot be denied their right to drill.	Cornucopian (personal rights to property and profit supersede the environment)

Source: Findlaw.com, Thomson Reuters

Islander East Pipeline Company LLC v. *Connecticut Department of Environmental Protection*

Islander East Pipeline Company LLC v. *Connecticut Department of Environmental Protection* involves the implementation of a natural gas pipeline. The Islander East Pipeline Company (IEPC) is stationed in Delaware, but is based out of Houston Texas (*Islander East Pipeline Company LLC* v. *CTDEP* 2006). On June 15, 2001 it proposed the construction of a natural gas pipeline that would begin in New Haven Connecticut and end in Long Island New York. The pipeline would cross through the Long Island Sound as it approached its final destination. Before outlining the legal situation surrounding the case, an account of the ecology within the habitats at stake in this case is necessary to add clarity to the legal disputes. The Long Island Sound is the home to several ecosystems that are mentioned in a section titled "Coastal Water Classification and Designated Uses" which is found in the appendix of the Second Circuit's opinion (*Islander East Pipeline Company LLC* v. *CTDEP* 2006). .

The section states that the proposed pipeline would cut through the waters of the Timble Islands which are located near the town of Bradford Connecticut (*Islander East Pipeline Company LLC* v. *CTDEP* 2006). It is noted that the waters off of the Timble Islands are in great condition and as a result, contain what the report calls an "abundant assemblage of marine life" (*Islander East Pipeline Company LLC* v. *CTDEP* 2006). The habitat is considered a region that

deserves protection due to the multiple marine species that reside in its waters that include the eastern oyster, hard clams, soft clams, blue mussels, and channel welks. The reason for the robust amount of marine life in the waters off of the Timble Islands is the marine floor that is shallow and contains sections comprised of mud, rock reef, sand, and other critical marine floor compositions. The waters are prime locations for the shellfish industry, and are designated as fishable through grants, leases, and open fishing areas. The pipeline's inevitable passage through the diverse marine ecosystem is at the center of the following legal disputes.

Acting in compliance with section 7(c) of the Natural Gas Act, the IEPC petitioned for and received approval from the Federal Energy Regulatory Commission (FERC) (*Islander East Pipeline Company LLC* v. *CTDEP* 2006). However, the IEPC was also required by the Coastal Zone Management Act and the Clean Water Act to seek and receive a Water Quality Certificate (WQC) from both the New York Department of Environmental Protection (NYDEP), and the Connecticut Department of Environmental Protection (CTDEP). The NYDEP granted the IEPC a WQC, but the CTDEP denied the application. The IEPC petitioned the Second Circuit Court of Appeals to review the CTDEP's decision on the grounds that the denial (1) impeded the IEPC's ability to implement a project that was approved under section 7 of the Natural Gas Act, and (2) denied a project that is in compliance with the Connecticut Water Quality Standards (*Islander East Pipeline Company LLC* v. *CTDEP* 2006). The Second Circuit accepted the petition and granted the review.

The judges that presided over this case were Reena Raggi, Jane Restani, and Amalya Kearse. Judge Kearse was appointed by Jimmy Carter in 1979, and Judge Raggi was appointed by George W. Bush in 2002. Judge Restani was assigned to the panel from her position on the

U.S. Court of International Trade. She was appointed to the U.S. Court of International Trade by Ronald Reagan in 1983. A 1992 *Washington Times* article recalled Judge Kearse's position against detaining individuals before their trial which is an example of the pro-criminal rights category that Segal and Cover (1989) describe as Democratic/Liberal (The Washington Times 1992). However, a 1993 *USA Today* article describes Judge Kearse as "liberal on social issues and conservative on business issues" and someone who "gets high praise from both ends of the political spectrum" (USA Today 1993). The combination of evidence provided by both articles and the fact that she was appointed by a Democratic President leaves Judge Kearse with a moderate Democratic/Liberal profile.

Judge Raggi is described by Democrats as conservative in a 2002 *Washington Post* article, but the Democrats followed up by stating that she "does not inject opinion into her rulings" (Dewar 2002). A 1995 decision by Judge Raggi that favored the ban of assault rifles in New York was mentioned by *The New York Sun* as a factor that would draw some concern from Republicans, but the party approved Judge Raggi's appointment (Starks 2002). The decision was made while she was sitting on the District Court of New York. The descriptions of Judge Raggi as conservative, but able to remove ideology form her decision making process earns her a moderate Republican Conservative profile. Though she was considered as "fair" by many of her peers in a 1998 *Journal of Commerce* article, Judge Restani also admits to being "Judicially Conservative" in the same article (Lucentini 1998). The combination of the Judge being appointed by President Reagan and her noted conservative beliefs leave Judge Restani with a Republican/conservative profile. Though this case has a Republican/conservative panel, there is evidence of moderate behavior and noted tendencies to abide by the letter of the law in the panel. The panel is considerably more moderate that the previous panel.

The court first dismissed claims of immunity by the CTDEP under the Tenth and Eleventh Amendments, and then established a standard of review (*Islander East Pipeline Company LLC* v. *CTDEP* 2006). The arbitrary and capricious standard was used by the court who first established that the CTDEP acted in compliance with federal before moving to the second prong of the arbitrary and capricious standard of review. The second prong of the arbitrary and capricious standard involves "considering whether the decision (by the CTDEP) was based on a consideration of the relevant factors and whether there has been a clear error of judgment" according to the Second Circuit (*Islander East Pipeline Company LLC* v. *CTDEP* 2006). With the pertinent case history, case facts, and standard of review established, the logic of the court's decisions with respect to the CTDEP's three pronged justification for the denying of a WQC to the IEPC can be assessed for evidence of environmental and/or cornucopian values. An examination of the logic behind the court's closing remarks and Justice Kearse's dissent will also be examined.

The first claim forwarded by the CTDEP was that the pipeline would result in serious consequences for the water and habitats surrounding the Timble Islands. The court assessed the argument that the installment of the pipeline would alter the quality of the water and ocean floor sediments that marine life relies on for survival (*Islander East Pipeline Company LLC* v. *CTDEP* 2006). The record is interpreted by the court to indicate that the damages to water quality would be temporary and therefore not a major harm. With respect to ocean floor quality, the court determined the CTDEP's inability to address evidence against their claim that the damage to the ocean floor would be permanent as facts in favor of the IEPC. Four studies that predicted the damages to be temporary were cited by the court as evidence in favor of the IEPC. The two studies cited by the CTDEP were then criticized by the court because they were unable to prove

the projected damage to be permanent. The refutation of the CTDEP's first prong of justification for denying the IEPC was based on factual inconsistencies and not the explicit application of particular cornucopian values by the court.

The Second prong involves the alleged violation of the CTWQS's "anti-degradation policy" (*Islander East Pipeline Company LLC* v. *CTDEP* 2006). The CTDEP argued that the construction of the pipeline would cause structural damage to the ocean floor and therefore permanently damage the ecosystem. The court assesses this claim with skepticism because in its view, the CTDEP failed to mention which particular shellfish populations would be harmed by the construction of the pipeline. The CTDEP argued that the shellfish depletion would harm commercial fishing interests because the pipeline would damage shellfish grounds that are leased for fishing. Citing commercial interests and damages provided the court with an opportunity to actually agree with the CTDEP by expressing cornucopian values. The court could have viewed the shellfish as means to achieve profit that should be harvested to the fullest extent, and furthermore perceived the pipeline as a hindrance or obstruction to the achievement of profit (Layzer 4, 2012). However, it relies on its powers under arbitrary and capricious review jurisprudence and relies on the CTDEP's ability to provide factual support for denying the IEPC permission to commence the drilling operation. At this point in the opinion, the court has relied on law without letting values interfere with its logic.

However, when assessing the merits of the CTDEP's contention that "backfill," or substances used to refill the holes and dredges that pipeline construction will create, the court allows values to enter the decision making process (*Islander East Pipeline Company LLC* v.

CTDEP 2006). The court counters the CTDEP's claim that "backfill" will harm marine life by stating the following:

> "Indeed, several studies in the record, commissioned by both proponents and opponents of the pipeline, support the conclusion that the use of engineered backfill could produce habitats even more diverse than those currently existing" (*Islander East Pipeline Company LLC* v. *CTDEP* 2006).

This statement is evidence of the use of the technology optimism value described in Chapter 2 as a cornucopian value. By relying on studies that contend pipeline construction "could" actually improve the living conditions for marine life, the court is engaging is assuming that the depletion of a natural resource (shellfish) will recover as a result of human manipulation of a habitat (*Islander East Pipeline Company LLC* v. *CTDEP* 2006; Layzer 4, 2012). This logic is textbook technology optimism according to Layzer (2012). Layzer's (2012) account of technology optimism not only considers the confidence entrusted in human technology, but also includes the belief that technology can be used to improve the natural world (4). The court's assertion that pipeline construction can make the shellfish habitats "even more diverse" expresses the belief that technology can improve the natural world (*Islander East Pipeline Company LLC* v. *CTDEP* 2006). After persistently relying on factual discrepancies, the court finally allows the cornucopian value of technology optimism to enter into its decision making process while assessing the second prong of the CTDEP's justification for denying the IEPC permission to construct the pipeline.

The fourth and final prong used by the CTDEP and assessed by the court is the claim that the proposed drilling plan violates the Connecticut Coastal Management Act. This claim was quickly dismissed without the use of cornucopian values because the Clean Water Act does not permit the CTDEP to consider statutory violations when the agency is deciding on WQC

applications (*Islander East Pipeline Company LLC* v. *CTDEP* 2006). The majority opinion also includes a fourth section which highlights other factors that led to the court's determination that the CTDEP's review of the proposed pipeline plan was arbitrary and capricious and in need of remand. The court cites the lack of depth in the CTDEP's records as well as emails between CTDEP members that discuss their lack of preparation with respect to defending their denial of a WQC to the IEPC. Again, the court relied on law and its interpretations of adequate legal preparation while staying away from environmental or cornucopian values.

The final aspect of *Islander* that must be investigated is Justice Kearse's dissenting opinion. It is expected that the dissent will contain evidence of environmental values if values are actually applied by Justice Kearse. The dissent opens by disagreeing with the majority's conclusion with respect to Connecticut waiving its immunity in the matter (*Islander East Pipeline Company LLC* v. *CTDEP* 2006). It then agrees with the use of the arbitrary and capricious standard of review. The dissent's assessment of the damages that pipeline construction would have on marine habitats differs from that of the majority. Justice Kearse describes the harm that the pipeline would have on marine environments as detrimental and furthermore contends that the length of time necessary for habitat recovery is uncertain.

According to Justice Kearse, the uncertainty with respect to the duration of time necessary for the marine habitats to recover from pipeline construction is viewed as a harm that outweighs the profit that the natural gas pipeline will create (*Islander East Pipeline Company LLC* v. *CTDEP* 2006). The dissent continues by stating "clams and oysters in particular, support significant commercial shellfish harvesting operations" (*Islander East Pipeline Company LLC* v. *CTDEP* 2006). This statement provides evidence of conservationist values in the dissent's logic.

As noted in Chapter 2, conservationism is a form of environmentalism that allows for the use of natural resources so long as the harvesting of said resources is done with strict government regulation that will assure responsible resource extraction (Layzer 3, 2012). The dissent is not opposed to shellfish harvesting for commercial need, but fears that letting the IEPC damage the population will harm the habitats ability to meet consumer need. Furthermore, the Government regulation that the CTDEP provides is necessary and should therefore be relied on and not questioned with speculation by the court. The dissent continues by questioning the majority's claim that the CTDEP failed to provide substantial evidence that the damage created by the pipeline would be permanent. It relies on a study presented by the CTDEP called the "Roberge Reports" that state the damage inflicted on the marine habitats by pipeline construction could lead to 100 percent mortality rates (*Islander East Pipeline Company LLC* v. *CTDEP* 2006). The dissent expresses environmental values then retreats back to factual disagreements that it has with the majority.

This case provided limited applications of environmental and cornucopian values and predominantly relied on the law and disputes within the record. The Second Circuit based its decision on an assessment of the reports presented before it. Even the one instance of technology optimism presented in the case was supported by the record reviewed by the court and not based on the panel's assumed understanding of pipeline technology and ecosystem recovery. A comparison of the Second and Tenth circuits application of environmental and cornucopian values will now examine potential discrepancies in logic as a result of the courts being located in regions with varying stake in the fossil fuel industry. The following figure provides a summary of the Second Circuit's logic.

Figure 15.

Islander East Pipeline Company LLC v. *Connecticut Department of Environmental Protection*

Steps of Assessment	Questions Reviewed	What the Court Decided	Environmental Values Expressed by the Court
	Majority Opinion		
1.	Would the pipeline significantly alter water and ocean floor sediment quality?	No, based on the court's interpretation of the evidence, no permanent damage would be inflicted on the water or sediments.	No evidence of values
2.	Would the pipeline cause structural damage to the surrounding aquatic ecosystems?	No, the CTDEP failed to specify which shellfish populations would be harmed by	No evidence of values
3.	Will the substances used to fill holes in the ocean floor caused by the pipeline destroy marine ecosystems?	No, the re-engineered holes in the ocean floor will actually improve the ecosystems.	Cornucopian (technology optimism)
4.	Does the pipeline project violate the Connecticut Coastal Management Act?	No, the statutory violation claim is not permitted because the Clean Water Act forbids such a claim at this point of the legal process.	No evidence of values

	Dissent		
1.	Will the pipeline project significantly damage marine ecosystems?	Yes, the marine life damaged by the pipeline will significantly harm commercial fishing for a significant amount of time, if not permanent.	Environmentalist (conservationism)
2.	Did the CTDEP provide sufficient evidence to support its claims of permanent environmental damage?	Yes, the "Roberge Reports" relied on by the CTDEP note that 100 percent population damage will occur in some instances.	No evidence of values

Source: Findlaw.com, Thomson Reuters

Comparative Analysis

When comparing the opinion and logic behind the *Islander* decision to that of *Biodiversity*), it is evident that the amount of times and manner that each respective court applied values to their logic differed. The *Biodiversity* Court was faced with eight decisions and let cornucopian values enter the decision making process four times, while the *Islander* majority applied cornucopian values one time out of a possible four opportunities during the decision making process. More importantly, the one instance where the *Islander* Court did express cornucopian logic was weak because the Second Circuit was relying on the optimism that was presented to it in the record. Again, in order for Hypothesis 2 to be supported, the *Biodiversity* Court must apply cornucopian logic with more frequency and more assumption that the *Islander* Court. Both courts had the opportunity to interject value based opinions during their analysis, but the *Biodiversity* Court was more forceful with respect to the manner in which it assessed the

proposed alternative drilling program. In Biodiversity, the Tenth Circuit deemed various mineral drainage prevention options as unreasonable because of the economic harm that the BLM and other private drilling groups would sustain due to losses in profit. Furthermore, the court was eager to protect the property rights of lessees.

The Tenth Circuit appeared to be fighting for the financial interests of both the lessees and the BLM. This behavior provides a reason for the court's quick utilization of cornucopian values when it faced a proposed alternative from the BCA et al. that was plausible under the law. The alternatives that involved the court forcing cooperation between the BLM and the State were easily struck down by the court because it could not force the proposed cooperation. The court also attacked the logic behind the alternative drilling program when applicable with respect to the use of protective wells and how that would eliminate the lessees ability to drill in the future. However, when the suggested drilling alternatives involved the court accepting the fact that the BLM could seek cooperation with private drillers and lessees on its own, the Tenth Circuit utilized cornucopian values to defend the BLM. Instead of applying the law or pointing out conflicting logic within the BCA et al.'s plan, the Court immediately considered the right to profit that the BLM and the lessees had with respect to drilling on the land. Instead of realizing that all parties involved would still obtain profit in a gradual manner, the court viewed the limits to profit as unacceptable and did not even consider the balance between environmental protection and profit that could have been obtained through the BCA et al.'s alternative. The Tenth Circuit found itself fighting for maximum profit, and relied on cornucopian values when necessary.

The Second Circuit majority adopted a different strategy and use of values in its opinion. While following the arbitrary and capricious standard of review, the court appeared to be searching for convincing evidence from the CTDEP that would justify the decision to deny a WQC to the IEPC. This strategy differs from the Tenth Circuit's apparent urge to defend the BLM instead of relying on studies and records to justify its decision. The Second Circuit majority never pro-actively defends the IEPC, it merely takes issue to the arguments forwarded by the CTDEP through what was predominantly an assessment of the record and its clarity or lack thereof. The fact that both individual species and entire marine ecosystems will be damaged is never disputed by the Second Circuit (*Islander East Pipeline Company LLC* v. *CTDEP* 2006). But in the eyes of the Second Circuit majority, the evidence utilized by the IEPC that suggested the ecosystems and species would recover was provided in a clear and convincing manner, while the evidence suggesting that the damage would be permanent was deemed unclear by the majority. While the *Islander* Court assessed the type and magnitude of the environmental damage that natural gas production would inflict, the *Biodiversity* Court neglected to consider the damages that natural gas drilling would cause and only considered the BCA et al.'s ability to assess damages after the proposed gradual drilling occurred. Even though they both resulted in anti-environmental outcomes, the two cases provide distinguishable considerations of potential environmental damages.

The second Circuit majority's reliance on the quality of evidence presented almost removed values from the decision making process entirely. The one instance where the Second Circuit did apply a cornucopian value was when it found the IEPC's argument that the substances used to fill ocean floor holes would actually improve ecosystems (*Islander East Pipeline Company LLC* v. *CTDEP* 2006). Though technology optimism can be a misleading

value that leads to environmental harm, the court's opinion of the re-engineered ocean floor holes may have differed if the CTDEP would have provided evidence that refuted the IEPC's claim. The *Islander* majority's consideration of evidence in order to develop a stance that included technology optimism differed from the *Biodiversity* Court's arbitrary determination that environmental regulations that limit, but do not eliminate profit, are harmful and unacceptable. In fact, the *Islander* majority states that both "proponents and opponents of the pipeline" noted that the re-engineered ocean floor would improve the ocean floor ecosystems (*Islander East Pipeline Company LLC* v. *CTDEP* 2006). The majority's technology optimism was evident, but not arbitrary. The *Islander* majority utilized cornucopian values in a limited capacity that was supported by evidence within the record while the *Biodiversity* Court forwarded cornucopian values to rebut logical environmental alternatives.

The different uses of cornucopian values by the two courts provides evidence that region affects the values that are applied to fossil fuel cases. However, the conservationist values evident in the *Islander* dissent provide evidence in favor of Hypothesis 2 located in Chapter 3. The *Islander* dissent is an example of how a court or panel that is located in a region that does not engage in significant fossil fuel production will utilize environmental values in its opinion while courts and panels located in regions that engage in significant fossil fuel production will exclusively rely on cornucopian values when the opportunity to or necessity of infusing values into the decision making process is presented. This comparative analysis demonstrates that the regional location of appellate courts affects the way in which they interpret cases and utilize values to do so. Though the *Islander* case resulted in an anti-environmental outcome, the utilization of law and presence of environmentalist values provides evidence that courts located in non-fossil fuel regions will apply law and values to its decisions that leave environmental

groups with a higher probability of obtaining a pro-environmental decision that that of courts in fossil fuel significant regions. Evidence of the values defined by Judith Layzer and Paul Wapner were also evident in the manner that Layzer (2012) outlined. One other difference between Islander and Biodiversity that was not covered in Hypothesis 2 was the disparity in partisan/ideological profiles. The panel assigned to *Biodiversity* possessed strong Republican/Partisan profiles, while the *Islander* panel possessed strong Republican/conservative, moderate Republican Conservative, and Moderate Democrat/liberal profiles. Therefore, the observed strength of a panel's partisan/ideological profile does appear to have some effect on their use of environmental values.

The case study provides support for Hypothesis 2, because it displayed the existence of discrepancies in the amount and manner that environmental values are used by courts in regions with differing fossil fuel significance. The different regions exposed different values and different value usage between regions in a fashion that matched Hypothesis 2. The court located in a region that engaged in significant fossil fuel production did use cornucopian values to reach its anti-environmental decision. The case study also provides an explanation for the logistic regression results. The reliance on cornucopian values by the Republican/conservative *Biodiversity* Court provides an example of what could have led to the drastic amount of anti-environmental decisions across the nation when the case was heard by a Republican/conservative court in a fossil-fuel significant region. Based on the case study findings, the regional discrepancies found in Chapter 4 appear to be value driven.

Chapter 6: Conclusion

This study examined the question of whether or not the regional location of the Federal Circuit Courts of Appeals affected the way the panels that presided over fossil fuel cases decided to find in favor of the fossil fuel industry or the environment. It searched for discrepancies in the number of pro- and anti-environment outcomes reached and challenged previous studies that attribute pro and anti-environmental attitudes in federal courts to partisanship/ideology. As a result, and investigation of the relationships between environmental values that stem from judges being familiar with the economic and environmental needs of their respective regions and case outcomes was enabled. However, partisan/ideological profiles were identified, compared with regional location, and examined with regional location in order to identify which factor played a larger role in the federal judiciary's decision making trends when the cases involved fossil fuels. Ultimately the partisan/ideological profiles that made up the judicial panels appeared to have a moderately significant relationship with case outcome while the link between regional location and case outcome was found to be weak.

The marginally significant relationship between partisan/ideological profiles and case outcome from the large-N data analysis in Chapter 3 supports the findings of Revesz (2003) that are mentioned in Chapter 1 and expands the 2003 study's consideration of the D.C. circuit to all thirteen of the Federal Circuit Courts of Appeals. To examine whether the marginally significant relationship between panel composition and case outcome is significant at a $p<.05$ level, later studies should consider a larger sample size that expands over the time period of ten years that was considered by this study. The one instance in the large-N portion of this study that displays a relationship between regional location and case outcome came when the regional location

variable was examined along with the panel composition variable. As shown in Chapter 3, there was a large disparity in the amount of pro vs. anti-environment findings. Again the use of a larger sample size and/or the consideration of specific circuits or states could further reveal the strength of the previously stated relationship.

The evidence of environmentalist and cornucopian values in both cases considered in Chapter 4 provide evidence of judges bringing outside factors that make up their belief profiles into their decision making process. This finding aligns with the claims of the studies reviewed in Chapter 1 including Huffman (2008), Cross (1997), and Cross and Tiller (1998). Furthermore the factors that the panels had to consider when assessing the pro- and anti-environmental claims in the two cases did provide openings for judges to infuse their beliefs and values into opinions which supports the claims of Judge Wald (1999) and Tiller and Cross (1999). The values found in Chapter 4 match the environmentalist and cornucopian beliefs that Layzer (2012) claimed to be existent in the Federal Judiciary. However the study commenced in Chapter 4 lacks generalizability for it only considers two cases. Also, a consideration of cases that also involve pro-environmental outcomes would provide a broader account of the manner in which panels apply environmental values. The fact that environmentalist values were found in the dissent of an anti-environmental case does display that courts located in non-fossil fuel regions have a higher probability of finding in favor of the environment, but considering the decision making process of a panel that does indeed find in favor of the environment would be a sound addition to this study's findings.

From a methodological standpoint, case studies that analyze judicial opinions for particular values appears to be a good way to assess the factors outside of law that judges

consider when making decisions. Taking values that have been applied to political actors and applying them to judicial opinions is feasible and should be utilized in future studies of the judiciary that consider environmental and anti-environmental criteria. Other values that do not apply to the environment or environmental law and politics could also be applied to judicial opinions in future work. The link between presidential appointment and the partisan/ideological profile of a judge is strong based on this study. The panelists observed in the cases study matched the partisan/ideological background of their appointing President with the only variations existing in the strength of their partisanship. Judicial opinions are useful documents with respect to assessing judicial value application.

The policy implications that result from this study involve the protection of the fossil fuel industry by the judiciary. Attempts to amend and re-interpret environmental policy by State Departments of Environmental Protection and environmental interest groups will have minimal success if the attempted policy change is heard by a court that is found in a region that engages in significant fossil fuel production and is composed of a panel with two or more judges with Republican/conservative profiles. If environmental policy change is sought in courts that are composed of a Republican/conservative panel, successful policy change is more likely to occur if the change favors the fossil fuel industry. Panels that are composed of Democratic/Liberal majorities are more prone to find in favor of the environment and ultimately shape policy in a manner that regulates the fossil fuel industry more stringently. From a regional location standpoint, when the case is heard in a region that does not engage in significant fossil fuel production, the chance that policy change that favors environmental regulation will be imposed by the court is fair, meaning that the judges appear to review the case by applying law and not values to determine the merits of a policy changing decision.

If political actors want to sustain or alter environmental policy by strategically appointing judges with particular environmental issue stances, they can look to the opinions that a particular judge has written and determine if the judge's use of environmental or cornucopian values is satisfactory. If political actors want to protect the fossil fuel industry, they will appoint judges who express cornucopian values and apply the opposite strategic process if the desired judge is one that is prone to find in favor of the environment and greater environmental policy change that strictly regulates the fossil fuel industry. Political actors can take the method applied in this study's case analysis and use it to select judges from an environmental point of view. This practice could be a critical component of the judicial appointment process in the circuits that are experiencing fossil fuel booms as a result of shale exploration. The assessment of judicial values could shape the environmental policy future of regions that are engaging in significant shale energy exploration due to political actors relying on value analyses of judges before appointing or confirming them.

Ultimately the findings in this study show that environmental interest groups, citizens, and Departments of Environmental Protection will enjoy greater success rates at the Federal Circuit level in regions that do not engage in significant fossil fuel production and in front of panels that consist of judges with moderate Republican/Conservative to Democratic/Liberal profiles. This conclusion provides initial evidence of the strategic placement of particular judges in particular circuits. Political parties, presidents, and other outside actors appear to be appointing particular judges to Federal Circuit positions because they know that these judges will promote the pro fossil fuel or pro environmental initiatives that each region necessitates. As congress reaches stalemates with respect to the passing of policies that provide the United States with a path for a sustainable and environmentally safe energy future, the courts are left with the

decisions that shape the environmental policy path that fossil fuel produces and environmentalists must travel in order to achieve their energy goals. The situation paints a troubling picture for environmentalists as the key regions and states with respect to energy production appear to be shielded from stringent environmental reform due to the strategic appointment of judges by political actors.

The effect that fossil fuel production has on the environment can be significantly detrimental. Without responsible political leadership, profit could overshadow environmental degradation. Today, judges are at times the default political actors when it comes to shaping environmental policy and the United States' energy future. They can either usher in a future of sustainable energy without environmental harm, or allow innovative fossil fuel production to persist without adequately assessing the environmental ramifications of their decisions. The path to clean energy must pass through the judicial branch, and outside political actors are aware. With no signs of congressional gridlock stopping, the courts will serve as both avenues and barriers to a clean energy future, and a combination of regional location, panel composition, and value application will determine which role the judiciary will assume.

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